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VOLUME 2
                                    Pages 215 - 480
                                UNDER SEAL PAGES 481 - 486
                UNITED STATES DISTRICT COURT
              NORTHERN DISTRICT OF CALIFORNIA
Before The Honorable YVONNE GONZALEZ ROGERS, Judge
EPIC GAMES, INC.,
                           ) NO. C-20-5640 YGR
      Plaintiff,
                                Tuesday, May 4, 2021
  VS.
APPLE, INC.,
                                Oakland, California
      Defendant.
                               BENCH TRIAL
APPLE, INC.,
      Counterclaimant,
                               Pages 481 - 486 (Under Seal)
  VS.
EPIC GAMES, Inc.,
       Counter-Defendant.
            REPORTER'S TRANSCRIPT OF PROCEEDINGS
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     TRANSCRIPT PRODUCED BY COMPUTER-AIDED TRANSCRIPTION
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1 TUESDAY, MAY 4, 2021 8:04 a.m. 2 PROCEEDINGS 3 THE CLERK: Remain seated, court is in session. Come to order. 4 5 THE COURT: Good morning, everyone. 6 **EVERYONE:** Good morning, Your Honor. 7 THE COURT: All right. Let's -- before we call your 8 case, and then I'll say my good mornings. 9 Ms. Stone, you want to call the case? 10 THE CLERK: Okay. Calling Civil Action 20-5640, Epic 11 Games Inc. versus Apple Inc. 12 Counsel please state your appearances. 13 MS. FORREST: Good morning, Your Honor. Katherine Forrest for Epic. 14 15 THE COURT: Good morning. 16 So we have some new people, it looks like. And actually 17 if I can get from each side the list of people who will be 18 coming in and out, especially the younger lawyers. I always 19 like to make sure I at least acknowledge them. I know they 20 are not doing the questioning, but I know they are working 21 hard in the background. 22 Mr. Bornstein, good morning. 23 MR. BORNSTEIN: Thank you, Your Honor. 24 MR. EARNHARDT: Good morning. Wes Earnhardt on 25 behalf of Epic.

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              THE COURT: Last name again, sir?
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              MR. EARNHARDT: Earnhardt.
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              THE COURT: Earnhardt. Okay.
              MR. BLAKE: Good morning, Your Honor. Brendan Blake,
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     Cravath, on behalf of Epic.
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              THE COURT: Okay. Mr. Blake.
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              MR. NIU: Good morning, Your Honor. Jin Niu,
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     Cravath, on behalf of Epic.
9
              THE COURT: Okay, Mr. Niu. And I think I've seen you
10
     on Zoom before, right?
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              MR. NIU: Yes, ma'am.
12
              THE COURT: Mr. Sweeney, good morning.
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              MR. SWEENEY: Good morning, Your Honor.
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              THE COURT: Again, your hot seat operator is?
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              MR. RUDD: Jason Rudd, Your Honor.
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              THE COURT: Mr. Rudd. Good morning.
17
         Okay. On Apple's team?
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              MR. DOREN: Good morning, Your Honor. Richard Doren.
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              THE COURT: Mr. Doren, good morning.
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              MS. DUNN: Karen Dunn, Your Honor.
         And I also want to identify over there in the back behind
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22
     the screen is Ms. Dearborn.
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              THE COURT: Good morning.
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              MS. MOYE: Good morning, Your Honor. Veronica Moye.
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              THE COURT: Ms. Moye, good morning.
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MS. BRASS: Good morning, Your Honor. Rachel Brass.
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              THE COURT: Ms. Brass, good morning.
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              MS. YANG: Good morning, Your Honor. Betty Yang on
     behalf of Apple.
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              THE COURT: Ms. Yang, good morning.
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         Mr. Schiller, good morning, sir.
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         Okay. And then in the gallery, we have, I think,
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     Mr. Nellis, Stephen Nellis from Reuters. Good morning, sir.
9
         And then I'm told maybe Michael Acton from LexisNexis?
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              MR. ACTON: Hi.
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              THE COURT: Good morning. And then we have, again,
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     Mr. Rodriguez.
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              MR. RODRIGUEZ: Good morning, Your Honor.
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              THE COURT: Who else is back there?
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              MR. PETERS: Good morning, Your Honor, Mark David
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     Peters for Nvidia, and Mr. Aashish Patel.
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              THE COURT: Thank you very much, sir.
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         And we have one more hot seat operator.
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              MR. SPALDING: Good morning, Your Honor. Matt
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     Spalding.
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              THE COURT: Spalding? Okay. I will get these down.
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         Before we get started, I just want to go on the record and
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     thank my staff -- or the court staff, not my staff but the
     court staff -- working really hard early in the morning to
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     make sure we get all these public lines working so lots of
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people can hear. I understand that they figured out how to 1 2 stream the audio so it is out there on YouTube. I -- we are 3 trying to track the numbers. I am a big advocate for court 4 access. 5 As I've mentioned to you all and you all know, this 6 District participates in any pilot project with the 7 Administrative Office of the Courts trying to provide access. 8 Because of COVID it didn't quite work for us in this case, but 9 we are trying to track the numbers so that we can send the 10 numbers to the Administrative Office of the Courts and try to 11 increase public access to federal proceedings. 12 I think it is really important that people understand how 13 things work in a court of law as opposed to in the court of public opinion. It is very different. 14 15 So I want to thank my staff again for that. 16 All right. Mr. Sweeney, we will get to you, sir, in just 17 a few minutes. 18 Ms. Forrest, do you have anything on your list with 19 respect to what we need to -- any administrative issues? 20 MS. FORREST: Your Honor, just as really points of 21 Yesterday -information. 22 THE CLERK: Let me turn on the mic. 23 THE COURT: Ms. Brass, you can take the other mic. 24 (Pause in the proceedings.) 25 MS. FORREST: All right. Yesterday it became clear

that there were some sensitivities with regard to information contained in party documents relating to third parties. parties are working together to address these issues and are hopeful that there will be no reason to raise anything with the Court. I just wanted to alert Your Honor to that fact that we are working hard on this.

Also we are very mindful of Your Honor's Samsung ruling already, and we are well in the process of limiting the portion of the proceeding that was sealed as much as possible and we are conferring on that actively.

THE COURT: Okay.

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MS. BRASS: And, Your Honor, one more point about which Ms. Forrest and I conferred and agreed. The transcript at 150, line 23 from yesterday to 151 line 3 makes clear that Defense Exhibit 4477 was introduced. The minutes say Defense Exhibit 4777, a simple typo, but we just wanted the record to reflect fully what was introduced and have also alerted Ms. Stone in advance to raising it on the record.

THE COURT: So one of the things that I will do -again, I wanted to get us a couple of days into the proceedings.

Either at the end of the day or the beginning of the day it is my practice to go through with you and identify what my notes show I have admitted.

And it occurred to me, again, because lawyers who have not

been practicing as long rarely get an opportunity to be at the podium. Part of becoming a litigator or trial lawyer is that you have to learn how to get the nervousness out of your system when you are standing there in front of a federal judge, or any judge, and part of that just takes practice.

So what I would like the parties to do is to designate a young lawyer to be in charge of exhibits at a minimum, and let them stand there at the podiums and we will go through the numbers together. And it's important to do because we obviously want to have the record clear, but it's not very high risk for you.

So I would encourage you to do that.

MS. BRASS: Very pleased to, Your Honor, for Apple.

THE COURT: Okay. And my notes show, which you said, Ms. Brass, 4477.

I understood that some of these documents that I had ordered sealed over the weekend were, in fact, released and were, in fact, disseminated.

So I don't know at this point with the genie out of the bottle, as they say, that there is a point in sealing them.

So I will talk to you all about that later, but if they are already released because of some error that was not the Court's error, and they were disseminated, the information is out there. I don't know why we would claim that it would need to be sealed in the courtroom.

Some of that information I had sealed and it was disseminated, because I went home and I learned that there were numbers that I had -- I knew I had sealed and now the public knew about them. And if that is the case, there is no point, in my view, in sealing that information, but we can talk more specifically about what at least what I am alluding to in a sealed session and then I'll open stuff up.

So, okay. Let's restart testimony.

Mr. Sweeney, if you will come back to the stand. And I will remind you, sir, you are still under oath. All right? Mr. Doren, you may proceed.

MR. DOREN: Thank you, Your Honor.

CROSS-EXAMINATION RESUMED

BY MR. DOREN:

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- Q. Good morning.
- Α. Good morning.

- Mr. Sweeney, we spoke yesterday about the Epic analytics team. Do you recall that topic generally?
- Yes. Α.

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- And the analytics team there at Epic is able to run various cuts and analyses of Epic user data among other things, correct?
- Α. Yes.
- And you're aware, aren't you, that of those who have downloaded Fortnite onto iOS platforms, roughly 75 percent of them have never made any purchase of any sort within Fortnite on any platform?
- I am sorry, I don't remember that statistic.
- Does that -- would it surprise you to learn that the vast 14 15 majority of people who downloaded Fortnite on iOS have never 16 made any purchase of any sort within Fortnite on any platform?
 - A. No.
- It is a freemium game, correct? 18
- Yes. 19 Α.
- 20 And one of your goals is that people be able to play your 21 game for free and then buy features and skins and cosmetics if 22 they choose to, correct?
 - A. On iOS we only sell cosmetic items. We don't sell features.
- 25 THE COURT: You don't sell?

THE WITNESS: Features. 1 2 BY MR. DOREN: 3 And, again, you mean that there can be nothing that helps to improve a player's performance. Is that what you mean by 4 5 that? 6 Α. Correct. 7 And are you aware that only 15 -- that 15 percent of 8 people who have downloaded Epic -- excuse me, Fortnite on 9 iOS devices have made purchases on multiple platforms? 10 I am sorry, I don't remember that. 11 Do you know what percentage of people who have downloaded 12 Fortnite on iOS have made transactions exclusively within 13 the App Store transaction platform? No, I don't remember. 14 Α. 15 Would it surprise you to know that it is in the 16 neighborhood of 5 percent? 17 Α. Yes. And if that were true, sir, then you would have 18 19 intentionally kept Fortnite off of iOS, despite an 20 invitation to return, keeping 95 percent of those off the 21 platform to fight over commissions being paid on transactions 22 conducted by 5 percent within the App Store platform alone, 23 true? MS. FORREST: Objection to the form of the question, 24 25 Your Honor.

THE WITNESS: I wasn't aware of that data, and it

THE COURT: Overruled.

played no role in Epic's decision.

BY MR. DOREN:

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- Q. Would you have thought it important if my statistics are true that you should have taken into account the impact on the consumers before electing to remain off of the App Store, despite invitations to return during the pendency of this litigation?
- A. Epic did consider the impact on consumers.
- Q. And you went ahead and did it anyway, correct?
- A. Correct.
- Q. I would like to talk for just a moment about how Epic accounts for its development expenses.
 - And isn't it correct that Epic has no -- makes no systematic effort to allocate its development costs among different projects?
 - A. Yes.
- Q. And that's because most of the software developed by Epic is used in a variety of situations, correct?
- A. I'm not sure if "most," but a very large portion of Epic's software development is used for multiple projects.
 - Q. Such as the Epic Games Store, correct?
- A. Yes, the Epic Games Store uses a variety of shared services.

- 1 Q. And third-party games?
- 2 **A.** I am sorry?
 - Q. And also your tools are used in terms of helping those with third-party games?
 - A. Yes.

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- Q. In other words, those developed by companies other than Epic, correct?
- A. Correct.
- 9 Q. And also the software development efforts and the other
 10 engineering efforts within Epic are used for the benefit of
 11 your own games, correct?
- 12 **A.** Yes.
- 13 **Q.** Fortnite, for example?
- 14 **A.** Yes.
- Q. And *Rocket League*, which is a game you acquired not too long ago, correct?
- 17 **A.** Yes.

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- Q. And any effort to attribute the cost of developing shared technology to a particular product use or customer would be largely artificial, correct?
 - A. Yes, that is my view of accounting at Epic.
- Q. And you also believe that any effort to attribute the cost of developing shared technology to a particular product use or service would be arbitrary, true?
 - A. Yes, very much within Epic.

- Q. And Epic does not organize around isolated business units, does it?
 - A. No, Epic does not.
 - Q. And Epic does not make decisions around business units, correct?
 - A. Correct.

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- Q. And Epic does not maintain any business unit or product-specific P&Ls, correct?
- A. I think the accounting team does that to a certain extent.
 - Q. I am sorry, sir. I didn't hear you.
- 11 **A.** I believe our accounting team does that to a certain extent but not systematically everywhere.
- Q. And they don't allocate expenses in any systematic way, correct?
- **A.** My understanding is we do not attempt to allocate shared engineering costs to particular projects.
- Q. Rather Epic operates holistically as a company that pursues the wide range of opportunities you see, correct?
 - A. Yes.
- Q. And you pursue those opportunities with as much synergy and sharing of technology and tools and people and processes as possible, correct?
 - A. Yes.
- Q. And you find that to be a good way to run a business, don't you?

Absolutely.

- Q. People are not focused on their own business unit P&Ls, for example?
 - A. Yes.

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- Q. Focused on innovation rather than how they personally or they and their business unit are performing?
 - A. Yes.
- Q. And you want your people focused on innovation, not on their own skins -- and I mean that literally -- or on the P&L of their own work, correct?
 - A. Yes.
- Q. Mr. Sweeney, if someone were to point at one product or
 service that your company offers and declare a precise profit
 margin for it, that assessment would be fundamentally flawed,
 wouldn't it?
 - A. Yes, within most parts of Epic, that's correct.
- 17 Q. Thank you.
 - Mr. Sweeney, we touched on this briefly yesterday, but after *Fortnite* launched on consoles, you turned to mobile development, correct?
 - A. Yes.
- Q. And all I really mean by that is it came after the mobile -- after the console launched. Do you understand that?
- 24 **A.** Yes.
 - Q. And the first mobile platform that you launched Fortnite

on was iOS, correct? 1 2 Α. Yes. 3 And that was several months before Android, true? Q. Yes. 4 Α. 5 And Nintendo Switch had not yet been released, right? 6 Α. Yes. 7 That came out a few months later in the summer of 2018? Q. 8 A. Yes. 9 And the launch of the Fortnite within iOS and within the 10 App Store occurred in April of 2018, correct? 11 Yes. Preceded by public beta in March. Α. 12 Q. Thank you. Thank you. 13 And so from the time that that public beta began to 14 August 13, 2020. So from March 2018 to August 2020 Apple 15 supported Fortnite's business model, correct? 16 Α. Can you elaborate on what you mean? 17 Sure. Let's break it down. Q. 18 Apple supported cross-progression for individual players 19 moving between iOS and non-iOS devices, correct? 20 Apple guidelines allowed cross-progression, yes. Α. 21 And, in fact, Fortnite played on iOS, had Q. 22 cross-progression consistent with those guidelines, correct? 23 Yes. Α. 24 And Apple supported Epic's cross-platform play between 25

different players on iOS and non-iOS devices, correct?

SWEENEY - CROSS / DOREN

A. Yes.

- Q. And Apple supported cross-wallet transactions between different transaction platforms via the App Store transaction platform or the Xbox transaction platform or some other, correct?
- A. Apple policy allowed cross-wallet transactions so long as we made all of those items -- were available elsewhere available on iOS.
- **Q.** So in other words, if you could buy it elsewhere and also buy it on the App Store, Apple was fine if people purchased it elsewhere, correct?
 - A. Correct.
- Q. That could be used by *Fortnite* players within the iOS environment, correct?
- **A.** Yes.
 - Q. So throughout the entire time the *Fortnite* was on iOS, players could buy V-Bucks on one platform and spend those V-Bucks on their iOS device, correct?
 - A. With respect to the non-Apple platforms which allowed that, yes.
 - Q. And when they did that, of course, by "that" -- "them," I mean when a player did that, Apple would not receive any commission from Epic, correct?
 - A. Correct.
 - Q. And yet those V-Bucks would be spent by the player on the

- SWEENEY CROSS / DOREN iOS device, correct? 1 2 Α. Yes. Now you mentioned that only certain platforms permitted 3 this. So Apple permitted it but not all others, correct? 4 5 A. Correct. 6 By "this" I mean specifically cross-platform and 7 cross-wallet play. Do you understand that? 8 Α. Yes. 9 And Sony did not permit cross-platform play on the 10 PlayStation for over a year after the launch of Fortnite, 11 correct? 12 That's right. Α. 13 And you got pretty aggressive with Sony in an attempt to 14 get them to agree, correct? 15 Yes, we had significant negotiations throughout 2018. 16 Sir, I believe you have your exhibit binder before you. Q. 17 MR. DOREN: Your Honor, I would like to show the witness Exhibit 3125 -- DX3125. 18 BY MR. DOREN: 19 20 Q. Mr. Sweeney, when you have that before you, please let me 21 know. 22 Α. I am here.
 - Q. Do you recognize this as an email string that you had with
- 24 Mr. Phil Rosenberg at Sony?
 - A. Yes.

And this is an email exchange, it looks like over the 1 Q. 2 weekend of June 2nd and 3rd, 2018. Do you see that? 3 I believe it begins on Friday, June 1st. 4 I appreciate that. I think you're right, sir. 5 MR. DOREN: And, Your Honor, I would move Exhibit DX3125 into evidence. 6 7 **THE COURT:** Any objection? 8 MS. FORREST: The only objection, Your Honor, is as 9 to the portions not written by Mr. Sweeney because they are 10 hearsay. If they are being offered for a nonhearsay use, then 11 there would be no objection. 12 MR. DOREN: It is simply being offered as 13 correspondence and communications between these two, yes. Obviously Mr. Sweeney's statement are a party admission. As 14 15 for Mr. Rosenberg, we are not offering them for the truth. 16 THE COURT: Admitted on that basis. 17 (Defendant's Exhibit 3125 received in evidence) MS. YANG: Your Honor, I apologize for the 18 19 interruption, but I think we need the AV cables to be switched 20 over to our side to be able to publish. 21 THE COURT: Okay. 22 MR. DOREN: Should I wait or should I continue? 23 THE COURT: It will just take --24 MR. DOREN: I don't know whose desk had to switch. 25 Thank you.

BY MR. DOREN:

- Q. Mr. Sweeney, I would like you to turn to that Friday, June 1, 2018 email on page .005 of Exhibit 3125.
 - Do you have that in front of you?
- A. Yes.
- Q. And this is an email that you sent to Mr. Rosenberg that Friday evening, correct?
- A. Yes.
- **Q.** And the subject line is *Fortnite* interoperability and esports, true?
- A. Yes.
 - Q. And you wrote to Mr. Rosenberg, Dear Phil. Sony's interoperability restrictions have put both of our companies in an untenable position adversarial to our customers. Many Fortnite players are kids and their friendships are being torn apart by Sony's segregation of players on competing platforms. That is what you told Mr. Rosenberg?
 - A. Yes.
 - Q. And what you meant by that was that friendships are being torn apart by Sony's segregation of players on competing platforms is that without cross-play, these friends would not be able to play Fortnite together, correct?
 - A. Correct. A PlayStation player could not play in a game session together with their friend on Xbox.
 - Q. But, again, Apple, as one of those competing platforms,

1 permitted cross-platform play at this point in time, correct? 2 Α. Yes. 3 And this was just a month and a half or so after the 4 public launch of Fortnite on iOS, correct? 5 Α. Correct. And in the next line you say, frankly, we do not believe 6 7 Sony's position is even legal, true? 8 Α. Yes. 9 That is something you said to Mr. Rosenberg on June 1, 2018? 10 Yes. 11 Α. 12 And this was all before Sony invested \$450 million in 13 Epic, correct? 14 Yes, approximately two years before. 15 Thank you. Q. 16 Now, Sony ultimately agreed to cross-platform play in 17 approximately September of 2018? 18 Α. Yes. 19 So two or three months after this email was sent? 20 Yes. My recollection is that after this conversation we Α. 21 had reached a verbal agreement on the principle that Sony 22 would support this. And that Sony would spend several months

developing a new policy, supporting it, and we entered into a

formal contract where Sony specified that policy approximately

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two months later.

- Q. And part of that, of course, was the provision in that contract that provided if the cross-play equation skewed one way that Sony would be entitled to more than 30 percent, correct?
 - A. Yes.

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- Q. In fact, Epic has made some payments to Sony under that provision, hasn't it?
- A. Yes.
- Q. Now, while Sony finally agreed to cross-platform play, it has never agreed to cross -- to permit cross-wallet transactions, correct?
- 12 **A.** That's correct.
- 13 Q. Up to this very day, correct?
- 14 **A.** Yes.
 - Q. Even as a partial owner of Epic Games, correct?
- 16 **A.** Yes.
- Q. And so it is for the PlayStation V-Bucks bought within the PlayStation store cannot be used outside of the PlayStation,
- 20 A. That's right.

correct?

- Q. And similarly V-Bucks bought outside of the PlayStation store cannot be used inside the PlayStation version of Fortnite, correct?
- 24 **A.** Correct.
 - Q. Now, Nintendo, maker of the Switch, also refuses to permit

- 1 cross-wallet functionality, correct?
 - A. Yes.

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- Q. So with a Nintendo Switch, players cannot use V-Bucks purchased outside of the Nintendo transaction platform on switch, correct?
- A. Correct.
 - Q. And as to Switch, Nintendo will not let V-Bucks purchased from or through the Nintendo transaction platform to be used on any other gaming device, correct?
- A. I'm not sure if Nintendo prohibits that. Epic does not support it.
- Q. Okay. So that doesn't happen in any event on Nintendo Switch, correct?
- 14 A. Correct.
 - Q. But Apple has never imposed any restrictions on cross-wallet transactions, correct?
- 17 **A.** No.
- Q. And, Mr. Sweeney, in your opinion, console makers

 generally do exercise a monopoly on distribution of purely

 digital games with respect to their platforms, right?
 - A. Generally. I'm aware of one exception.
- 22 \blacksquare **Q.** Okay. One exception to that monopoly?
- A. I understand that Nintendo allows Switch games to be sold by at least one third-party retailer digitally.
 - Q. But other than that one exception, you believe that the

1 console makers generally do exercise a monopoly on 2 distribution of purely digital games with respect to their 3 platforms, right? 4 Α. Yes. 5 New topic. Mr. Sweeney, you are familiar with an 6 organization called the Academy of Interactive Arts and 7 Sciences? 8 Α. Yes. 9 It's an organization with about 30,000 members. Does that 10 sound right to you? 11 I am sorry, I don't know the membership. 12 Q. Haven't made the count lately. I understand. 13 That is an organization of video game industry 14 professionals, though, isn't it? 15 Α. Yes. 16 And every year it holds an event called the DICE Summit? 17 A. Yes. 18 And DICE, as I understand it, stands for design, innovate, 19 communicate, and entertain? 20 I am sorry, I don't know. Α. 21 Well, I guess I've researched that one a little harder Q. 22 than you have, sir. 23 But that academy does have a hall of fame, correct? 24 A. Yes.

And in 2012 you were inducted into the hall of fame of the

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     Academy of Interactive Arts and Science, right?
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     Α.
         Yes.
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         A belated congratulations.
     Q.
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         And you were honored at the Summit that year, weren't you?
 5
     Α.
         Yes.
 6
     Q.
         And you gave a speech?
7
     Α.
         Yes.
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     Q.
         And the topic or title of that speech was Technology and
9
     Gaming in the Next 20 Years. Do you recall that?
10
         I don't recall the title.
11
         Would you agree the subject matter was about the future of
12
     gaming?
13
         I'm not certain. I have given at least two talks at DICE
14
     Summits. I am not sure I am recalling which is which.
15
        Fair enough. Fair enough.
16
         Well, sir, Exhibit 3768 is a transcript that we had
17
     generated from the video of the speech that you gave the year
18
     that you were inducted into the hall of fame, which was 2012.
19
              MR. DOREN: Your Honor, we do have that video on a
20
     thumb drive for the record, and we would like to play a brief
21
     excerpt of that which is at page 26, lines 1 to 23 of the
22
     transcript that is with the Court.
23
              THE COURT: Okay. And this is 3768?
24
              MR. DOREN: Yes, Your Honor.
25
```

THE COURT: All right. Proceed.

```
1
              MR. DOREN: Thank you.
 2
                          (Videotape started.)
 3
              At the same time we have a lot of --
              THE COURT: Hold on. Can you wait?
 4
 5
         I'm trying to figure out what the court reporter is going
 6
     to do here. At first I thought it would be easy, but what I
 7
     would like to do is relieve the court reporter of her
 8
     obligation to transcribe, given how fast it sounds like he is
 9
     talking. And the parties are instructed to provide the court
10
     reporter with that portion of the transcript. She will append
11
     that portion of the transcript to the end of the trial
12
     transcript.
13
         Any objection?
14
              MR. DOREN: None here, Your Honor.
15
              THE COURT: Okay. Ms. Forrest?
16
              MS. FORREST: No objection.
17
              THE COURT: The court reporter is relieved.
18
         All right. You may proceed.
19
              MR. DOREN: Why don't you start over, Matt.
20
                            (Excerpt played.)
21
     BY MR. DOREN:
22
        Mr. Sweeney, first of all you recognize this as a speech
23
     that you gave at DICE?
24
        Yes. I now remember the context. This is exactly the
25
     speech I gave that year.
```

SWEENEY - CROSS / DOREN Q. 1 Thank you, sir. 2 And in 2012 in that speech you stated that in your view 3 there were too many gaming platforms, correct? I am sorry, did I use those words? 4 Α. 5 Well, let's go ahead and take a look at page 26 of 6 Exhibit 3768 where you say at line 8, this is too many 7 platforms. 8 Do you see that? 9 Α. Yes. 10 And do you agree now that in this speech you said that 11 there were too many platforms as of 2012? 12 A. Yes. 13 And you were referring to gaming platforms, correct? 14 I think I was referring to computing platforms. Α. 15 And you believed that the field of these platforms would 16 sort itself out through competition, correct? 17 Α. Yes. 18 What the slide behind you in that speech referred to as 19 the platform war, true? 20 Α. Yes. 21 And today, just as in 2012, there are smartphone platforms, correct? 22 23 Yes. Α.

24

25

Q.

Α.

And PCs?

Yes.

- 1 Q. And Macs?
- 2 **A.** Yes.
 - Q. Various game consoles, correct?
- 4 **A.** Yes.

- 5 Q. And some handheld gaming devices as well?
- 6 **A.** Yes.
- Q. And, of course, the tablets that kind of amazed you back in 2012 are now everywhere, true?
- 9 A. Yes. They are far more common now.
- Q. And they are not just iPads as you talked about in your 2012 speech, are they?
- 12 A. I'm aware of Android and Microsoft Windows tablets also.
- 13 Q. Things like Microsoft Surface?
- 14 **A.** Yes.
- Q. And then when we say "Android," we really mean to cover a whole broad number of tablets generated or created by other
- 17 companies, correct?
- 18 **A.** Yes.
- 19 Q. Such as Samsung's Galaxy tabs, true?
- 20 **A.** Yes.
- 21 **Q.** And there is the Amazon Fire, correct?
- 22 \blacksquare **A.** I am not familiar with the Amazon Fire.
- 23 **Q.** And Lenovo has Smart Tabs?
- 24 **A.** I am not sure.
- 25 Q. And all of these various computing platforms that we have

just talked about, today almost everyone has more than one of these devices in their home, correct?

- A. Well, certainly not. There are, I think, more people in the world than smart -- any consumer computing devices, to my understanding.
- **Q.** All right, sir. But let's stick within the United States and talk about people that play *Fortnite*. You believe that people who play *Fortnite* tend to have access to more than one computing device, correct?
- A. I think some do.

- Q. A significant percentage, true?
- A. I don't know the percentage.

THE COURT: You don't know what, the percentage?

THE WITNESS: Yes.

BY MR. DOREN:

Q. And, Mr. Sweeney, before we move on to the next topic, I just want to make sure we have a clear record.

Apple does -- and going back now to Apple's policy regarding cross-wallet transactions, you would agree, wouldn't you, that Apple has never restricted cross-wallet play at any time while *Fortnite* was on iOS, true?

A. My recollection is that Apple policy didn't mention cross-wallet transactions until sometime in 2018. And prior to that I think the guidelines were silent on it. But in all of our discussions with Apple, Apple was fine with

- cross-wallet transactions.
 - Q. And from March of 2018 forward, Apple's permitted cross-wallet transactions on iOS for Fortnite, correct?
 - A. Yes.

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- Q. Now, one of the ways that all of these different platforms compete in the gaming area is through the tools that they offer developers, correct?
- A. I don't think -- these platforms compete to limited and different extents among each other. They each offer tools.
- Q. And as a member of the Apple developer program, Epic had access to the developer tools that were developed by Apple, right?
- 13 **A.** Yes.
- Q. And as we discussed yesterday, *Unreal Engine* still does, correct?
 - A. Yes.
- Q. And *Unreal Engine* uses those tools to assist developers in creating apps that can be used in the iOS environment,
- 19 correct?
 - A. Yes.
- Q. And since joining the Apple developer program in 2010,
 Epic has worked with thousands of different Apple APIs and
 tools, right?
- A. If you are referring to individual function calls within these APIs, I believe so.

```
And one example of those APIs is one called Metal, right?
1
     Q.
2
     Are you familiar with Metal?
3
     A.
         Yes.
        And that is one of the APIs that Epic has used?
 4
5
     Α.
         Yes.
6
         That's a graphic API?
     Q.
7
     A.
         Yes.
8
     Q. And it contributed to Epic's ability to -- and the API
9
     called Metal contributed to Epic's ability to efficiently
10
     build a top-quality version of Fortnite for iOS, right?
11
     Α.
         Yes.
12
        And if you look please, sir, at Exhibit 3098.
13
              THE COURT: DX3098?
14
              MR. DOREN: Thank you, Your Honor. Apologies.
15
     DX3098.
16
         Your Honor, while Mr. Sweeney is looking at that, could I
17
     please move DX3768 into evidence?
18
              THE COURT: Any objections?
              MS. FORREST: That's the DICE.
19
20
              THE COURT: That is his speech?
21
              MS. FORREST: No objection, Your Honor.
22
              THE COURT: That's admitted.
23
             (Defendant's Exhibit 3768 received in evidence)
24
              MR. DOREN: Thank you, Your Honor.
25
```

1 BY MR. DOREN:

- Q. Mr. Sweeney, have you had an opportunity to review Exhibit
- 3 DX3098?
 - A. Yes.

4

- Q. And do you recognize this as an internal email string at Epic?
 - A. Yes.
- 8 **Q.** From May 2018?
- 9 **A.** Yes.
- 10 Q. And the re line is, quotes for WWDC. Do you see that?
- 11 **A.** Yes.
- 12 **Q.** And what does WWDC stand for?
- 13 A. It is Apple's worldwide developer conference.
- Q. And this May 11, 2018 email was weeks after the public
- 15 launch of *Fortnite* on iOS, correct?
- 16 **A.** Yes.
- 17 **Q.** Perhaps days.
- 18 **A.** Yes.
- 19 Q. And Apple asked if Epic would be willing to provide a
- quote about its impressions of Metal for use at Apple's WWDC,
- 21 correct?
- 22 **A.** Yes.
- 23 Q. And at the bottom of page 1, carrying over to page 2,
- there is an email from you on May 9 where you say more, colon.
- 25 And then at the top there is a paragraph in italics.

1 Do you see that? 2 Α. Yes. 3 And you wrote that? Q. Α. I think I did. 4 5 And what you wrote here, Mr. Sweeney, is Metal gave us the 6 injection of performance required for shipping the full 7 Fortnite: Battle Royale experience on iOS quickly with no 8 comprises. 9 Does that mean "compromises"? 10 Α. Yes. Right. This is a misspelling. 11 Q. Sure, sure. 12 And then you go on to say, porting a game built for 13 high-end gaming consoles to iOS was a greatly superior 14 experience with Metal than OpenGL. 15 Correct? 16 Α. Yes. 17 And did you mean that when you wrote that? Q. Α. Absolutely. 18 19 Q. And what is OpenGL? 20 Α. OpenGL is a multiplatform graphics API. 21 And OpenGL can be used to -- or was being used at that Q. 22 time in particular for graphics on Android devices? 23 Yes. And previously the format was used on iOS devices. Α. 24 So this was an improvement created by Apple through its 25

innovation that benefited Epic, correct?

A. Yes.

- Q. And OpenGL was also used on other platforms during this period aside from Android devices, true?
- A. Yes.
- Q. And Metal was superior to OpenGL, no matter what platform OpenGL was being used on, true?
- A. At this point I believe Metal only existed on iOS. So it could not be compared on other platforms.
- Q. And if we go back to the exhibit, sir, Josh Adams includes then a second quote immediately above yours on page 1.

Do you see that?

- A. Yes.
 - Q. And who is Mr. Adams?
- **A.** He is a senior programmer at Epic.
 - Q. And Mr. Adam's quote says, we've been making use of Metal on iOS since its release in 2014 to great effect. A fast, agile, feature-rich API like Metal is exactly what we need to bring a game designed for modern consoles and desktops to the battery-powered iPhone and iPad. As a developer it blows away OpenGL in every way. We were able to get Fortnite ship-ready on iOS in a handful of months as we weren't hindered by graphics.

Do you see that?

- A. Yes.
- Q. And do you agree with that statement?

```
1
     Α.
         Absolutely.
2
         And in fact immediately above that you wrote on May 9th, I
3
     like yours the best. Let's give both to Apple and let them
4
     mix and match and attribute as they like.
5
         That is what you said in response to Mr. Adams?
 6
     Α.
         Yes.
7
         And you did, in fact, like his quote the best?
8
     A.
        Yes.
9
         And, Mr. Sweeney, I would like to show you what has been
10
     marked -- let me back up.
11
              MR. DOREN: Your Honor, I'm not sure if I've done
12
     this, so let me do this now. I would ask to move DX3098 into
13
     evidence.
14
              THE COURT: Any objection?
15
              MS. FORREST: No objection, Your Honor.
16
              THE COURT: Admitted.
17
             (Defendant's Exhibit 3098 received in evidence)
18
              MR. DOREN: Your Honor, I would next like to show the
     witness DX4036.
19
20
         May I approach, Your Honor?
21
              THE COURT: You may.
22
              MR. DOREN: Sorry. That was not in there.
23
              THE WITNESS: Thank you.
24
     BY MR. DOREN:
25
         Mr. Sweeney, I have handed you what has been marked as
```

- Exhibit DX4036. Have you had a chance to review it?

 A. I need a minute.
 - Q. Of course.
 - A. Yes.

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- Q. Do you recognize this to be an email exchange between you and Mr. Spencer at Microsoft in January of 2018?
 - A. Yes.
- Q. And in the bottom email on January 9th, you write to Mr. Spencer, stating in the second paragraph, we're bringing Fortnite Battle Royale to iOS and Android in late February.

 Do you see that?
- A. Yes.
- Q. And, in fact, as you already told us, it went into beta testing in March, correct?
 - A. Yes.
- Q. And then you go on to say, not a dumbed-down version, but the full experience, correct?
- 18 **A.** Yes.
- Q. And was that a true statement when you made it to Mr. Spencer in 2018?
- 21 **A.** Yes.
 - Q. And in the next paragraph in the second sentence, you said, we want to work with Microsoft to unblock all console mandated interop restrictions in time for this launch. I'm confident we'll achieve this with the other guys and, at any

rate, platforms that block interop will be siloed. 1 2 Again, does this refer to Microsoft's hesitance to provide 3 the cross-platform play that you knew that Apple was about to? I am sorry, can you repeat that. 4 Α. 5 Q. Sure. 6 Was this a reference to Microsoft's current unwillingness 7 to agree to cross-platform play? 8 Microsoft's position at this time was ambiguous. 9 Microsoft did not have a very clear position. They often 10 spoke publicly in support of cross-platform. And so Epic 11 wanted to eliminate the ambiguity with Microsoft of other 12 cross-platform policies. 13 And part of that ambiguity was it wasn't happening, 14 correct? 15 Correct. It wasn't happening. Α. 16 Q. And so you wanted to solve the ambiguity by getting them 17 to agree to do it, correct? 18 Α. Yes. 19 And you used the fact that Apple was bringing a version of 20 Fortnite online on iOS to motivate Microsoft to permit 21 cross-platform, correct? 22 Epic was bringing Fortnite to iOS, not Apple. 23 Thank you. I misspoke. I appreciate that. Thank you, Q. 24 sir.

25

But you agree?

SWEENEY - CROSS / DOREN

A. Yes.

- Q. And you knew that that would motivate Microsoft because it did not want to be less relevant by being cut out of cross-platform play that included platforms like iOS, correct?
- A. Yes.
- Q. And, in fact, in Mr. Spencer's email at the top, in the fourth paragraph, he states, net is I want to work this through with you. I wish we had more time to work through the iOS and Android scenario. Sounds like we basically have two to three weeks. I don't know how we get ahead of this in the future. I think we've been partners on Fortnite, so hopefully we can collaborate on roadmaps more going forward.

In fact, Mr. Spencer was concerned about how to coordinate with you in light of the iOS launch that was coming up in a few weeks. Correct?

- A. Yes.
- Q. Sir, I would ask you please just to turn back to DX3125 for a moment.

And you will recall that this is the email from June 2018 in which you are asking Sony to agree to cross-platform play, correct?

- A. Yes.
- Q. It's the email in which you said, frankly, we do not believe Sony's position is even legal?

SWEENEY - CROSS / DOREN

A. Yes.

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Q. And I would ask you to turn to the last paragraph of that email, the very first email you sent in this chain, where you state, We urge Sony to find a way to enable this in a positive partnership and to join Apple, Google, Microsoft, and Nintendo as stewards of platforms enabling all customers to play together with all of their friends.

That is something that you wrote to Mr. Rosenberg in June 2018, correct?

- A. Yes.
- Q. And that was your view of the relevant different transaction platforms for *Fortnite* regarding cross-platform play, correct?
 - A. This is the set of platforms in which Fortnite wanted to support or did support cross-platform play.
 - Q. Thank you.
 - Mr. Sweeney, are you familiar with a publication, I believe it's an online publication, called Eurogamer?
- A. Yes.
- **Q.** And what is Eurogamer?
- A. It's a website, possibly with an accompanying magazine,

 covering the topic of gaming in Europe. I believe focused on

 console and PC.
 - Q. And have you been interviewed by Eurogamer in the past?
 - A. Yes.

1 And if you could please take a look at Exhibit DX3199. Q. 2 And this is a version of Eurogamer from March 21, 2019. 3 Α. Yes. And, sir, do you remember giving the interview reflected 4 5 in this version of Eurogamer? 6 A. I'll need a minute. 7 Of course. Q. 8 Yes, I generally remember it. 9 MR. DOREN: And first of all, Your Honor, I would move Exhibit DX3199 into evidence. 10 11 **THE COURT:** Any objection? 12 MS. FORREST: No, Your Honor. 13 THE COURT: Admitted. (Defendant's Exhibit 3199 received in evidence) 14 15 BY MR. DOREN: 16 And, Mr. Sweeney, in the initial paragraph, the 17 interviewer makes clear that one of the topics to be addressed in the interview is the Epic Games Store, but he also asks in 18 19 the first question, the big talking point this week has been 20 Google's Stadia. You have obviously been briefed and are very 21 involved in it. What is your take on it? 22 And Google's Stadia was a streaming service that was 23 launched around 2019, correct? 24 My recollection is it was announced in that time frame but

was not publicly available.

Q. Thank you.

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And in your response you say, I'm very excited. *Unreal*Engine fully supports it. We've been working with them on a

technical capacity on this for a very long time. It's

exciting to put ten teraflops of computing power in front of

every device of every size in the world.

Is that a statement that you made in this interview in 2019?

- A. Yes.
- Q. And you are referring to the fact that a streaming device or a streaming service functioning well can give even a small device extraordinary computing power since it's playing games off of a remote server, correct?
- A. Yes. It enables any device to connect to a server with a lot of computing power.
 - Q. And if you go down please to -- and also, I am sorry, sir.

 Unreal Engine, your other company, with the game engine was actually working on an -- on the technical capacity with Google, correct?
 - A. Yes.
- 21 Q. And does it continue to work with Google on Stadia?
 - A. Yes.
 - Q. You've been making progress over the last couple of years?
 - A. Unreal Engine has been continuing supporting Stadia.
 - Q. And if we go down, sir, to the next statement, you state,

- 1 we live in a multiplatform, multi-ecosystem world now. 2 Is that a statement you made in 2019? 3 A. Yes. 4 And do you agree with that statement today? 5 Α. Yes. 6 And you state, we see heavy Fortnite engagement across 7 multiple platforms, all these different stores and platforms, 8 they need to connect together and support players playing 9 across their favorite devices in their different ways. 10 Is that a statement you made in 2019? 11 Α. Yes. 12 And do you still agree with that statement today? 13 Α. Totally. And going down, sir, below the box you see it says -- the 14 15 state -- you state, the state of gaming changes over time, 16 right, and we're all going to have to keep up. 17 Is that a statement you made in 2019? 18 Α. Yes. 19 Q. And do you still agree with that statement today? 20 Α. Yes. 21 Digital gaming is a very dynamic world, isn't it? Q. 22 Α. It changes over time. 23 And then do you also agree, sir, that a great game will Q.
 - A. I recall that statement. I don't recall the context in

succeed wherever it's sold?

24

SWEENEY - CROSS / DOREN

which I made it.

Q. Well, if we look down here, sir, you are asked, it is encouraging for those looking to join the store, too, I'm sure.

Referring to the Epic Games Store, correct?

- A. I am sorry, where are we?
- Q. The bottom of the first page of Exhibit 3199. The very last question and answer on that page.
- A. Right. Here I am referring to competition among PC game stores, yes.
- Q. Mr. Sweeney, you say that the high number of initial users or visitors that your store had proves not that Epic store is awesome, it's that games come first and that a great game will succeed wherever it is sold. It proves that developers have the real power in the industry and that where developers go, customers will go with them.

Was that a statement that you made in 2019?

- A. Yes.
- Q. And is that a statement you still agree with today?
- A. Yes. In the context of the PC gaming business.

THE COURT: I don't think I understand what you mean by that. So are you saying that great games in some other context will not succeed or will not drive success?

THE WITNESS: Your Honor, I was referring to competition among PC game stores, the Epic Games Store and

Now, that statement is not limited to PC games, is it?

1 Α. The question I was answering was about the Epic Games 2 Store PCs competing with other stores on PC. My statement 3 that it is the games that come first and that a great game 4 will succeed wherever it's sold is my belief universally. 5 My second statement, it proves that developers have the real power in the industry and that where developers go, 6 7 customers will go with them, it's specific to the PC industry. 8 iOS developers can't go anywhere but the iOS store. 9 So, sir, in your opinion, though, it's that games come 10 first and that a great game will succeed wherever it's sold, that is a generally applicable statement, correct? 11 12 Α. Yes. 13 In terms of game stores, Mr. Sweeney, you would agree that stores should be able to make their own decisions about the 14 15 quality of apps and other attributes of the apps that should 16 be permitted to their stores, correct? 17 To the extent they are freely competing with other stores, 18 yes. 19 And, in fact, what is on a particular store is part of the 20 competitive landscape among different stores in which 21 customers make decisions between stores based on the quality, 22 selection, and other policies of stores, correct? 23 Α. Yes.

A. I believe approximately 200 to 300.

24

25

Q.

How many games are in the Epic Games Store?

- Q. And what percentage of those are paid download versus premium versus free?
 - A. The large majority of games available on any day are paid games. There are several free games that are always free.

 And then each week we offer a new game free for just that week.
 - Q. So the vast majority are paid download games, correct?
 - A. Yes.

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- Q. How many premium games are there?
- A. There are at least a handful.
- Q. How big is a handful, sir?
- 12 **A.** I am sorry. I would estimate at least 10.
- 13 Q. Thank you.
 - Let's -- I would like to show you a slide from your opening statement if I can. It is the one that identifies the various apps that I believe were described as nongaming apps.
- Do you have that slide in front of you?
- 18 **A.** Yes.
- Q. And you testified yesterday on direct that the Spotify app, the one on the left, that was the first nongaming app, true?
 - A. I am sorry, if I did, I was missing one, which is the Unreal Engine, which has been available on the Epic Games Store since inception.
 - Q. That is the developer engine run by your other company,

1 correct? 2 Α. Yes. 3 Other than your developer engine, in terms of consumer-facing apps, the first nongame app was Spotify, 4 5 correct? 6 Yes, that's my recollection. Α. 7 And that was as -- I believe you said a couple months ago? Q. 8 Α. Yeah, that's my recollection. 9 And, in fact, Spotify is a member of something called the 10 Coalition for App Fairness, true? 11 Α. Yes. 12 And that's a coalition that you all created around the 13 time that you launched the hot fix and filed this litigation? 14 Epic, Spotify, Match, and Tile formed the Coalition for 15 App Fairness sometime in, I believe, September or October of 16 2020. 17 Sir, a couple of months ago you were able to get Spotify to come on to the Epic Games Store, true? 18 19 Yes. Α. 20 One of your coalition members? 21 Α. Yes. 22 And the next app is something called itch.io, correct? Q. 23 Α. Yes.

And that is a game store?

24

25

Q.

Α.

Yes.

- 1 Q. And itch.io joined the Epic Games Store April 22, correct?
- 2 A. I'm sorry, I don't remember the precise date, but thereabouts.
 - Q. About 11 days ago.
 - A. Yes.

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- Q. Is that before or after you flew to California for this trial?
 - A. I am sorry, which day of the week was that?
- 9 Q. Let's call it Thursday.
 - A. I think it was after.
- Q. Okay. And itch.io is now kind of a store within your games store, correct?
- 13 **A.** Yes.
- Q. And you don't know -- well, first of all, how many games are on itch.io?
- A. I am not certain, but my understanding is at least hundreds.
- 18 Q. Have you -- have you looked at them all?
- 19 **A.** No.
- Q. Do you know what criteria itch.io uses to include new games on its site?
 - A. No.

- Q. Do you know the identity of the various developers who have put games on itch.io?
- 25 **A.** No.

- Q. Now, prior to itch.io, Epic had never had a store within its store, correct?
 - A. That's true with respect to software stores. One might consider Spotify a music store.
 - Q. Okay. Now -- and now you are back to Spotify, right?
 - A. Yes.

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- Q. And next on this opening graphic, was iHeart. The iHeart was also added around April 22nd, correct?
- 9 **A.** Yes.
- 10 Q. After you arrived in California for this trial, correct?
- 11 **A.** Yes.
- Q. And KenShape, that, too, was launched or on the Epic Games

 Store around April 22, 2021?
- 14 **A.** Yes.
- Q. And Krita was also placed on the Epic Games Store on April 22, 2021, correct?
- 17 **A.** Yes.
- 18 \mathbf{Q} . And Brave was also placed on the App Store on April 22,
- 19 2021, correct?
- 20 **A.** Yes.
- 21 **Q.** And it was important to you to get all of these transactions completed before this trial started, right?
- 23 **A.** Yes. That was one of my motivations, to lead by example.
- Q. Because you wanted to be able to have this slide shown in your opening statement, true?

- A. It was not about a slide at that point.
- Q. Just to be able to present this evidence to this Court, right?
- **A.** I wanted to -- for Epic to demonstrate that we welcomed apps and other stores on our store.
- Q. Mr. Sweeney, do you have any plans to change the name of the Epic Games Store to something other than the Games Store?
- A. No. Epic Games is the name of our company. I don't plan to change it to something else.
- Q. You testified yesterday that you expect the Epic Games

 Store to be profitable in three to four years. Do you

 remember that testimony generally?
- A. Yes.

- Q. Now when you say profitable within three to four years, you don't mean to suggest that the amount the company has invested in minimum guarantees to various game developers will have been paid off, do you?
- A. That is not what I had in mind. I was thinking of turning an operating profit year -- year by year.
- Q. Because you actually expect to never recoup hundreds of millions of dollars of those minimum guarantees, correct?
- A. I don't know if that is quite right. I don't expect to recoup those minimum guarantees from the sales of the games where we made the guarantees, but we might recoup them there other profits later.

particular paragraph number, and, in fact, the first word.

1 MR. DOREN: Your Honor, this is the first I've heard 2 of this as to this document. And the language I was shown 3 that raises this issue is in the second email from the top 4 from Mr. Sweeney to his board member, copying his various 5 internal executives regarding Epic Games Stores' P&L. 6 Now, either Epic Games Store is relevant to Epic Games or 7 we shouldn't be talking about it in this lawsuit, and he is 8 talking about the ROI scenario within the Epic Games Store. 9 MS. FORREST: Your Honor, the issue is one that -- I 10 apologize, we have only just been recently alerted to this 11 issue --12 THE COURT: I have received, I don't know, what, 10 13 motions from third parties asking me to seal information. 14 I've not received a request with respect to this document. 15 MS. FORREST: You have not received a request with respect to this document, Your Honor. It relates to Paradox, 16 17 and this was -- that is the third party. It is not just an Epic within Epic about Epic. If that was the issue, that 18 19 would not be why I'm standing up, Your Honor. It is because 20 it reveals particular, very sensitive information about a 21 third-party deal. And we were only alerted to that issue this 22 morning. 23 MR. DOREN: Your Honor, first of all, I had no 24 intention to raise the name of that company, and I'm not the 25 one using it now.

I'm happy to speak generally in terms of the internal discussion within Epic about the impact of that deal on Epic.

And I will not raise any of the specific terms in relation to that minimum guarantee. We are just taking it at a conceptual level here.

THE COURT: I think that's fine.

My rulings on these topics have been, with respect to third parties current as opposed to historical information, I have been sealing revenue share numbers. I have indicated in at least one order, and the draft order that I'm working on right now during breaks, that general references to this information I will not seal.

So to the extent you want to talk about a particular number, I have the document in front of me. Those particular numbers should not be -- should not be published because we have press in the room, and I would stay away from any specific numbers.

Again, if it's current. This is about a two-year-old document. Were any kind of specialized negotiated terms I have tried to be sensitive to those issues. But otherwise let's try to proceed.

MS. FORREST: Your Honor, may I raise one more point, which is after documents are used in testimony, they are released into this thing called the Box. And I would just ask if we can just also have those same parameters that Your Honor

```
1
     has indicated with regard to the numbers be applied to the
2
     documents released in the box.
3
              THE COURT: I need to do that specifically,
4
     Ms. Forrest. That is not your call; that is my call.
 5
              MS. FORREST: I understand. May I have time to
     present something to you, Your Honor, prior to its release in
6
7
     the box?
8
              THE COURT: You have lunch.
9
              MS. FORREST: Thank you.
10
              MR. DOREN:
                          Thank you, Your Honor.
11
              THE COURT: You may proceed.
12
              MR. DOREN: Thank you, Your Honor.
13
     BY MR. DOREN:
14
         Mr. Sweeney, do you recognize Exhibit 3818 as an internal
15
     Epic email string which leads off, in other words the first
16
     email on the first page is from September 14, 2019, from San
17
     Phan to Steve Allison?
18
     Α.
         Yes.
         And if you could please, sir, if you could turn back to
19
20
     the first email in the chain which begins at the very bottom
21
     of page 3, a September 13, 2019, email from Steve Allison.
22
         Do you see that?
23
         Yes.
     Α.
24
         And Mr. Allison is the general manager of the Epic Games
25
     Store?
```

- A. 1 Yes. 2 And Mr. Allison will be joining us here later this week? 3 A. Yes. And Mr. Allison here is laying out the terms of a proposed 4 Q. 5 minimum guarantee transaction, correct? 6 Α. Yes. 7 And this receives a response from a David Wallerstein? Q. 8 Α. Yes. 9 Mr. Wallerstein is a board member of Epic Games? Α. Yes. 10 11 He is one of the two board members from Tencent? 12 Α. Yes. 13 In one of the two seats that they received with their 14 approximately 40 percent investment in the company? 15 Yes. Α. 16 And if you could look down, please, about halfway down the 17 page. 18 Do you see the entry from Mr. Wallerstein saying, of 19 course, reviewing this request? 20 **THE COURT:** We are on page 3 of the document -- or 21 the third page. 22 BY MR. DOREN: 23 Q. And it is actually just below the middle ring of your
- binder, where it says, of course, reviewing this request would be helpful.

1 Do you see that? 2 Yes, yes. Α. 3 Thank you. Q. I understand the issue with trying to find your way 4 5 through these emails. 6 Mr. Sweeney, Mr. Wallerstein stated, of course, reviewing 7 this request would be helpful if reviewed in the context of an 8 overall financial model and strategic plan for EGS that shows 9 how the large minimum guarantee outlays drive the business. 10 Do you see that? 11 Α. Yes. 12 And then up at the top of that same page, he says, the 13 focus below feels a bit more about the likelihood to recoup 14 the minimum guarantee only, but we should also confirm the 15 overall financial impact to Epic to service this relationship 16 and, of course, the forecasted revenues and additional users 17 that can come to Epic. 18 Do you see that? 19 Α. I heard it, but I am sorry --20 The top of page 3, Friday the 13th, 2019. From Q. 21 Mr. Wallerstein. Thanks for the background. 22 Α. Okay. I see. Sorry. 23 And you agree this is a statement from Mr. Wallerstein on Q. 24 September 13, 2019?

A. Yes.

- Q. And then please turn to page 1. And this is where you weigh in, correct, on September 14th?
- A. Yes.

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- Q. A little before 6:00 in the morning Eastern, correct?
- A. Yes.
 - Q. And you state in the second paragraph of your email,
 Obviously the direct ROI -- is that return on investment?
 - A. Yes.
- Q. Obviously the direct ROI scenario here is super crappy.

 The long-term value is in bringing consumers into Epic's

 multigame, multiplatform, social, and ecommerce system.

Was that your view on the purpose of these minimum guarantees back in September of 2019?

- A. Yes.
- **Q.** Does that remain your view today?
- 16 **A.** Yes.
 - Q. And then going down into the next paragraph you say, the complete future value of these deals is a function of new user LTV -- is that lifetime value?
 - A. Yes.
 - Q. -- comma, of the effect of new exclusive and nonexclusives on reengaging lap store users, an extent to which third-party games drive *Fortnite* and vice versa.

And then you say, of the extent to which Epic strategy can drive business model competition across platforms to benefit

SWEENEY - CROSS / DOREN 1 our own games and leverage the disruption to establish the 2 leading cross-platform social ecosystem for gaming. 3 And is that one of the main reasons why you've entered 4 into these minimum quarantees? 5 Α. Yes. 6 And is that one of the main reasons why you opened the 7 Epic Games Store in the first place? 8 Α. Yes. We aspire to have a store on many platforms. 9 Then you refer to Xbox Live, PlayStation, and Steam. 10 you state that these platforms are all locked games -- are all 11 locked to one platform in those entities; is that right? 12 A. Yes. 13 If I could ask you, please, sir, to look at Exhibit 4361. 14 Tell me when you have that. 15 Α. I'm there. 16 Excellent. Do you recognize this to be an Epic Games 17 Store deck regarding a review of performance and strategy for the store that was created for a presentation on October 25, 18 19 2019? 20 Α. Yes. 21 And if you could please turn, sir, to page .020. Page 20. Q. 22 Α. Yes.

And this shows a five-year P&L and user forecast, correct?

23

24

25

Q.

Α.

Yes.

```
correct?
1
2
         This is with multiple versions of forecasts.
3
         One being an aggressive pursuit model, correct?
     Q.
     Α.
 4
         Yes.
5
         And what is an aggressive pursuit model?
 6
     Α.
         This was Epic very heavily investing in the business to
7
     promote growth.
8
        And the other being the winding-down model, correct?
9
     Α.
        Yes. This was looking at the worst-case scenario where
10
     the store fails, and we just have to pay out minimum
11
     guarantees despite that.
12
     Q. All right. So why -- let's look first at the aggressive
13
     pursuit model. And I will drive straight to the bottom line
14
     here.
15
         If we look down to the --
16
              THE COURT: Mr. Doren, I'm going to stop you for a
17
             I don't have that document. Let me get it.
     moment.
18
              MR. DOREN: Thank you, Your Honor.
19
              THE COURT: You said 4361?
20
              MR. DOREN: We can hand one up if you like.
21
                          Is it PX or DX?
              THE COURT:
22
              MR. DOREN:
                          DX3461.
23
              THE COURT: Okay I have it.
24
         You may proceed.
25
              MR. DOREN: Thank you, Your Honor.
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BY MR. DOREN:

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- Q. Mr. Sweeney, on page .020 of Exhibit 4361, I would ask you to look, please, at the EBIT lines for these two scenarios.

 Do you see those lines?
- A. Yes.
- Q. And what is EBIT?
- A. Earnings before interest and corporate tax.
- Q. Okay. And this shows this tracks this tracks earnings, if you will, these estimated earnings, both on an annual basis across these years from 2019 to 2027, and on a cumulative projected basis, correct?
- A. Yes.
- Q. So in other words, how the company -- the store is projected to do each year, and then how the store is projected to have done taken together over the years, correct?
 - A. Yes.
 - Q. And if we look at those lines, we see that when we get out to 2024, under the aggressive pursuit model, that is the first year where a profit is projected, correct?
 - A. Yes.
- 21 Q. And -- but the cumulative -- that is a profit of -- is that \$15 million?
- 23 **A.** Yes.
- Q. But it was also projected that as of 2024, the cumulative earnings of the company would be a negative 854 million?

- A. Yes, that's a cumulative earnings of the store.
- Q. The cumulative earnings will be negative \$854 million, correct?
 - A. Yes.

- Q. And if we then track out what is called here as the flow from prior years to 2025, 2026, and 2027, by 2027 the store is still estimated to be in a cumulative negative state of a loss of \$719 million, correct?
- **A.** Yes.
 - Q. And the estimated earnings for that year, for that year standing alone, is only \$5 million, correct?
- **A.** Yes.
 - Q. And then if we look over at the winding down model, we see that if we go out to 2024, that is the first year where there is a projected profit, a positive amount of money for operations for that year alone, correct?
 - A. Yes.
- 18 Q. And that's \$36 million?
- **A.** Yes.
- Q. And there would still be a cumulative loss under the winding-down model of \$654 million, correct?
- **A.** Yes.
- Q. And if we go out to 2027, we see that the cumulative loss would be \$642 million, correct?
- **A.** Yes.

SWEENEY - CROSS / DOREN 1 And, of course, these numbers don't include any of the Q. 2 unallocated costs and expenses we talked about before, 3 correct? For example, any of the shared technology development that 4 5 may benefit the store. 6 I need a minute. 7 (Pause in the proceedings.) 8 THE WITNESS: I am not sure that is correct. There 9 is a people cost running into the tens of millions of dollars 10 in this model. So I think the finance team may have attempted 11 to do some cost attribution. 12 BY MR. DOREN: 13 So, Mr. Sweeney, are you saying that there may be a head 14 count costs in here? 15 Yes. Α. 16 Q. Okay. 17 A line called People. Α. 18 So among the expenses that are included in these forecasts 19 are the head count expenses specific to the store, correct? 20 A. I don't know what the finance team was referring to when 21 they wrote "People" here. 22 Q. But there are no engineering costs in here anywhere, are

A. I don't know whether engineering costs are included in

23

24

25

there?

People.

```
Q.
1
         Thank you.
2
         Mr. Sweeney, let's talk for a few minutes, and --
3
              THE COURT: Okay. Can I make sure our record is
4
     clear? Are you moving 4361?
5
              MR. DOREN: Thank you, Your Honor. I would have
 6
     gotten there eventually. May I please move -- first of all,
7
     DX3818 into evidence, if I haven't done that.
8
              THE COURT: You haven't. So 3818 is admitted, but
9
     we'll wait until I hear from Ms. Forrest --
10
              MR. DOREN: Thank you, Your Honor.
              THE COURT: -- after lunch.
11
12
              MR. DOREN: And I would also move to admit DX4361.
13
              THE COURT: I assume no objection.
              MS. FORREST: No objection, Your Honor.
14
15
              THE COURT: 4361 is admitted.
16
            (Defendant's Exhibit 4361 received in evidence)
17
              MR. DOREN: Thank you, Your Honor.
     BY MR. DOREN:
18
19
        Mr. Sweeney, you testified yesterday that by the spring of
20
     2020 you had initiated Project Liberty, correct?
21
     A. We were in the planning and preparation phases of at that
22
     point.
23
     Q. Okay. And by that time you had hired your lawyers who
24
     helped you implement that, correct?
25
     A. By spring, yes.
```

- Q. And those are the lawyers who are representing you in this lawsuit?
 - A. Yes.

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- Q. And you'd also, in the spring, you hired a public relations firm, correct?
- A. Yes.
- Q. And by May 2020 you had settled on your strategy regarding a hot fix, correct?
- 9 **A.** At that point we had a plan of record that included the hot fix.
- Q. And, sir, if you could please take a look at Exhibit 4419, DX4419.
- Do you have that exhibit in front of you?
- 14 **A.** Yes.
- Q. And do you recognize this to be an internal Epic email chain from May 11, 2020?
- 17 **A.** Yes.
- Q. And the first email at the top of the first page is actually from a gentleman named Mark Rein, correct?
- 20 **A.** Yes.

- 21 **Q.** And he is the cofounder of Epic Games?
- 22 \blacksquare **A.** Yes. He joined Epic in 1992.
- 23 **Q.** And he owns about 4 percent of the company?
- 24 **A.** Thereabouts.
 - Q. If we can go back, please, to the first email in this

chain from May 11th at 11:25 a.m. It's from Daniel Vogel.
Who is Mr. Vogel?

- A. Daniel Vogel is Epic's chief operating officer.
- Q. And Mr. Vogel states, making sure we were all in alignment on approach and what to focus our limited mind share on.

Then he goes on to say the critical dependency on going live with our V-Bucks price reduction efforts is finding the most effective way to get Apple and Google to reconsider without us looking like the baddies.

Do you see that?

A. Yes.

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- Q. And did you agree with Mr. Vogel that that was a critical issue related to Project Liberty?
- 14 **A.** I was focused on various other things.
 - Q. You were leaving this to Mr. Vogel, the chief operations officer?
 - A. He played a major role in the planning of the price drop.
 - Q. Thank you.

Now you go on to say — he goes on to say, Here is my understanding of the plan. We submit a build to Google and Apple with the ability to hot fix on our payment method that passes the savings on to customers. We flip the switch when we know we can get by without having to update the client for three weeks or so. Our message is about passing on price savings to players. Google and Apple will immediately pull

SWEENEY - CROSS / DOREN

the build for new players and potentially take an even more aggressive stance.

And first of all, you agree with Mr. Vogel about what the plan regarding a hot fix was as of May 11, 2020, correct?

- A. Yes. That's the plan pertaining to the hot fix.
- Q. Okay. And the point in flipping the switch at a point where there would be three weeks until an update was that even after the Direct Pay option had been implemented, it would remain in place for players and they would be able to continue playing cross-platform because they would be on the same version as other players on other platforms, correct?
- A. Yes.

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- Q. But after Fortnite was updated, and the version on iOS remained the previous version because Apple had pulled it, they would -- the players on iOS would no longer be able to interact with other platforms, correct?
- A. If Apple and Google blocked Fortnite, which I was not certain would happen.
- 19 Q. Mr. Vogel was, though, wasn't he?
 - A. Mr. Vogel appeared certain.
- Q. And your email on page 1 from May 11 at 12:44 p.m., it is about two-thirds of the way down the page. Let me know when you see that.
 - A. Yes.
 - Q. And you say, hi, Ed.

SWEENEY - CROSS / DOREN

And you are referring now to Ed Zobrist in the email below?

Α. Yes.

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- Who is Mr. Zobrist? Q.
- An Epic executive involved in our mobile gaming strategy. Α.
- You say, Hi, Ed. I don't seem to be invited to a Wednesday meeting. Please add me to all meetings on the topic. Please keep me in the loop on this topic 100 percent. Please feel free to come to me directly in email or otherwise any time to get clarification on anything. Otherwise, it heads off the rails and I have to fix it and undo a bunch of work.

You are referring now to your general efforts as the leader of the Project Liberty initiative, correct?

- Α. Yes.
- Q. Now, yesterday you discussed with your counsel that on June 30, 2020, Epic sent an email to Tim Cook, Phil Schiller, Craig Federighi, and Matt Fischer, correct?
- Α. Yes.
- 20 Q. And that was also the same day that Epic renewed its 21 developer program license agreement, wasn't it?
- 22 Was it? I'm not aware. I am aware that we renewed our 23 agreement in June sometime.
- 24 You are aware that Epic renewed its developer program 25 license agreement in June 2020 within hours, days, or weeks of

```
1
     sending this email, correct?
2
     Α.
         Yes.
3
     Q.
         And let's turn back to Exhibit 4477.
 4
              THE COURT: You are moving in 4419?
 5
              MR. DOREN: Thank you, Your Honor. Move to admit
     4419.
6
7
              THE COURT: Assuming no objection.
              MS. FORREST: No objection, Your Honor.
8
9
              THE COURT: It's admitted.
10
             (Defendant's Exhibit 4419 received in evidence)
     BY MR. DOREN:
11
12
         Mr. Sweeney, have you managed to located 4477?
13
     A.
         Yes.
14
        Okay. Great. Thank you.
15
         And Mr. Sweeney, just a couple of quick comments on this
16
     since you did address it yesterday. But in your email after
17
     setting out your two demands for competing payment processing
18
     options, and also a competing Epic Games Store app available
19
     through the iOS App Store and through direct installation
20
     that has equal access to the underlying operating systems
21
     features for software installation and update as the iOS App
22
     Store itself has.
23
         Let me pause there. Those were the two things you were
24
     asking for on June 30, 2020, correct?
25
         And also that we hoped that Apple would make these options
```

available to all iOS developers.

- Q. Well, we will get there. We will get there.

 But the two items you were demanding are set out at the top under Items 1 and 2, correct?
- A. These are the options -- these are the capabilities I said Epic would like to offer consumers.
- Q. And, Mr. Sweeney, after saying that you hope that Apple will also make these options equally available to all iOS developers, in the next paragraph you note that in order for Epic to have these two capabilities, Apple would need to provide a side letter or alter its contracts and standards documents to remove said subscriptions to allow Epic to provide a competing App Store and competing payment processing option to iOS customers.

That is what you said on June 30, 2020, correct?

A. Yes.

Q. And you went on to say please confirm within two weeks if Apple agrees in principle to allow Epic to provide a competing App Store and competing payment processing, in which case we will meet with your team to work out the details.

Correct, that's what you said on June 30, 2020?

- A. Yes.
- Q. By the way -- by the way, Mr. Sweeney, if I look down further in that last paragraph, you state, if we do not receive your confirmation, we will understand that Apple is

Case 4:20-cv-05640-YGR Document 617 Filed 05/10/21 Page 72 of 266 286 SWEENEY - CROSS / DOREN not willing to make the changes necessary to allow us to provide Android users with the option of choosing their App Store and payment processing system. Do you see that? Α. Yes, that is a typo. Can I assume you sent this same email message to Google on June 30, 2020? Sent a similar email to Google on that same day. Little bit too similar. So in that one you generally referred to Android rather than Apple, correct? A. Yes. And here you just miss changing Android to Apple in one

- 15

instance, correct?

Yes. Yes, sir.

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Α.

- 16 So this is essentially a form demand letter, correct?
- 17 This was fairly customized to the specific policies of each platform which differed. 18
 - Q. Mr. Sweeney, if we can please look at Exhibit DX3774. Let me know when you are there, sir.
 - I'm here. Α.
- 22 And do you recognize Exhibit DX3774 as an update to the 23 board of directors on Project Liberty dated July 27, 2020?
- It's either the update we gave the board or a draft of it. 24 Α.
 - Q. And if you would turn, please, sir, to the -- to page 2,

```
002.
1
2
         Do you have that in front of you?
3
     Α.
         Yes.
        And you state here that -- and by the way, you are the
4
5
     chairman of the board of Epic Games, correct?
6
     Α.
         Yes.
7
         And you state here, the time is now. Solve this problem
8
     before AR takes off and that rate is set at 30 percent.
9
         Did I read that correctly at the bottom of the page?
10
     Α.
         Yes.
11
         And AR is a reference to augmented reality?
12
     A.
         Yes.
13
         And that's a recent innovation in gaming?
14
         I think it's a technology that is still in the development
15
     in gaming.
16
     Q. Fair enough.
17
         It is kind of the bleeding edge of gaming technology,
18
     correct?
19
         Gaming and also consumer computing.
20
        And, in fact, Apple's engineers are at the cutting edge of
21
     augmented reality, correct?
22
         Apple has a robust AR SDK, as do several other companies.
23
         And you are familiar, then, with Apple's ARKit?
     Q.
24
     Α.
         Yes.
```

And, in fact, Unreal Engine supports ARKit, correct?

A. Yes.

1

2

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8

- Q. Meaning that it helps developers to work with it, correct?
- 3 **A.** Yes.
- Q. And you believe that Apple, through its innovations in AR, is going to be a meaningful participant in augmented reality gaming going forward, correct?
 - A. I expected Apple to be a significant AR market participant in the future.
- 9 Q. And yesterday you testified in response to a question that revenue for Epic Games in 2020 was up.
 - Do you recall that testimony generally?
- 12 **A.** Yes.
- 13 Q. But you weren't asked anything about 2019, were you?
- 14 **A.** No.
- 15 \blacksquare Q. And Epic's revenue in 2019 was down from 2018, correct?
- 16 **A.** Yes.
- Q. And while it was up in 2020, it was not back up to 2018 levels, was it?
- 19 A. At what point in time?
- 20 Q. Let's go year over year, sir.
- 21 A. I am sorry, I'm not certain of Epic's 2018 revenues.
- 22 Q. You are certain, though, aren't you, sir, that 2020
- received a particularly historically unique pop because of the
- 24 pandemic?
- 25 **A.** Yes.

1 Q. Lots of people at home looking to do things, correct? 2 Α. Yes. 3 So lots of people playing digital video games like Fortnite, correct? 4 5 Lots of people are playing Fortnite. Α. 6 And if you would go back, please, to Exhibit PX2463. This 7 was a document used with you by Epic's counsel. 8 Α. 2463. 9 It is not in the binder I've handed you. It would have 10 been provided by your counsel yesterday. 11 THE COURT: Did you give him that document? 12 MR. DOREN: I have not handed it up. I'm about to, 13 Your Honor. 14 I have another copy for the Court. 15 May I approach? 16 THE COURT: You may. 17 MR. DOREN: Thank you. THE WITNESS: Thank you. 18 19 **THE COURT:** This was previously admitted. BY MR. DOREN: 20 21 Mr. Sweeney, now that I provided it to you, do you have 22 PX2436 in front of you? 23 Yes. Α. And just go down, please, to -- on the first page of that 24

exhibit, under the highlight section.

```
1
         Do you see that?
2
     Α.
         Yes.
3
         States that total gross revenue in the second quarter of
     2019 was 1.1 billion, down 27 percent year over year.
4
5
         Did I read that correctly?
6
     Α.
         Yes.
7
         This information from Mr. Babcock would be accurate
8
     information, wouldn't it?
9
     Α.
         Yes.
         Who's Mr. Babcock?
10
     Q.
11
     Α.
         He was Epic's CFO at the time.
12
     Q.
         And when does Epic's second quarter end?
13
     Α.
         End of June.
14
         If you would turn to page 2, please, under Q3 outlook, or
15
     3Q19 outlook.
16
         Do you see that?
17
         Yes.
     Α.
18
         And the first bullet point states, we currently expect
19
     Fortnite to generate $802 million in gross revenue in 3Q '19,
20
     28 percent lower than our initial forecast of 1.1 billion.
21
         Do you see that statement?
22
     Α.
         Yes.
23
        And does that accurately reflect Epic's expectations about
     Q.
24
     3Q '19 as of the date of this document?
25
     Α.
         Yes.
```

- SWEENEY CROSS / DOREN 1 Q. Now, Epic submitted the code that ultimately facilitated 2 the hot fix on August 3, 2020. 3 Do you recall that? I don't remember the date, but I remember the general time 4 Α. 5 frame, yes. 6 Very early August, correct? 7 To my knowledge. Α. 8 Q. And it was reviewed and uploaded within 24 hours by Apple, 9 correct? 10 I don't know. 11 But you do know that the nature of the build and the 12 hidden code was not disclosed to Apple, correct? 13 A. Correct. 14 And the day after it was approved, you sent a note to 15 Microsoft, didn't you? 16 A. I don't remember sending. I remember I sent an email to 17 Phil Spencer. Q. Let's take a look at that email, please. It is Exhibit 18 DX4579. Very back of your binder. 19 20 I'm there. Α. 21 Mr. Sweeney, do you recognize Exhibit DX4579 to be an 22 email from you to Mr. Spencer on August 5, 2020?
 - MR. DOREN: Your Honor, I would move Exhibit 4579 into evidence.

24

25

Yes.

Α.

1 **THE COURT:** Any objection? 2 MS. FORREST: No objection. 3 THE COURT: Admitted. (Defendant's Exhibit 4579 received in evidence) 4 5 BY MR. DOREN: 6 And in the third paragraph of Exhibit 4579 you state that, 7 Epic has certain plans for August that will provide an 8 extraordinary opportunity to highlight the value proposition 9 of consoles and PCs in contrast to mobile platforms and to 10 onboard new console user. 11 That is a statement you made to Mr. Spencer on August 5, 12 2020, correct? 13 Α. Yes. You then go on to say, while I can't share details with 14 15 any third party at this point, I give you Epic's assurance 16 that our efforts will be positive and supportive of the 17 Microsoft, Xbox, and Windows, correct? 18 Α. Yes. 19 Q. And you are referring here to the hot fix, aren't you? 20 I am referring to Epic's launch of Project Liberty. Α. 21 And you believe that it would make consoles and PCs appear 22 to have -- present a better value proposition to users in 23 contrast to mobile platforms, correct? 24 Α. Yes. 25 And you believe that would be an important thing for

1 Mr. Spencer to know, correct? 2 Α. Yes. 3 That he would be pleased with that? 4 I think I was presenting it as an opportunity to 5 Microsoft. 6 And you also talk about it providing him the opportunity 7 to onboard new console users, correct? 8 Α. Yes. 9 And two days later you kind of reminded Mr. Spencer about 10 what was about to happen, didn't you? 11 Α. I'm not sure. 12 Let's take a look, please, at 3478. 13 Let me know when you're there, sir. 14 Α. Yes. 15 And do you recognize this to be an email exchange between 16 you and Mr. Spencer on August 6th and August 7th of 2020? 17 A. Yes. And in an email on August 7th you respond to Mr. Spencer's 18 19 message, and you say totally understood. I gather there's a 20 lot going on at Microsoft nowadays. 21 You stated that, correct? 22 Α. Yes. 23 And then you go on to say, anyway, you'll enjoy the 24 upcoming fireworks show. 25 And that is a reference to Project Liberty, isn't it?

Α. Yes. 1 2 And the fireworks show happened on August 13, 2020, 3 correct? 4 Α. Figuratively, yes. 5 Figuratively. That was when figuratively the flip was Q. 6 switched on the hot fix? 7 Well, literally. Α. 8 Q. That was literal. 9 All right. The hot fix was implemented. Yes. 10 Α. 11 And the Direct Pay function was put in place within 12 Fortnite on iOS? 13 A. Yes. 14 And you notified Apple around 2:00 a.m. Pacific Time on 15 August 13th, correct? 16 A. Yes. 17 And we've already seen that document, haven't we? Q. 18 Α. Yes. 19 Q. And that was the first time Apple ever told -- that Apple 20 was ever told of Epic's plans, correct? 21 Α. Yes. 22 After it had been implemented, right? Q. 23 Α. Yes. Well, I am sorry, I believe the notification was roughly 24

simultaneous with the implementation.

1 Q. Thank you. 2 And after the hot fix was triggered, you launched a PR 3 campaign, correct? After the hot fix was triggered, Epic announced a Fortnite 4 5 and mega drop price drop. 6 And you also announced the free Fortnite cup, correct? 7 We did that after Apple had blocked Fortnite from iOS. Α. 8 Q. Well, sir, after the hot fix was implemented, you 9 initiated the free Fortnite cup, correct? 10 Α. Chronologically that is true. 11 And you also launched a campaign around something that 12 says hash tag free Fortnite, right? 13 Α. Yes. 14 You had your graphics folks put together some caricatures 15 of related Apple, correct? 16 Epic put together a short video film called 1980 Fortnite. Α. 17 It is satirizing Apple and its policies. And that was posted on August 13th, correct? 18 19 Α. Yes. After Apple blocked Fortnite. 20 So on August 13th the hot fix was triggered, the lawsuit Q. 21 was filed, the video was posted, correct? 22 Α. All those things happened on that date.

THE COURT: Assuming no objection, 3478 admitted.

MR. DOREN: Please move -- excuse me.

Let's please take a look at Exhibit 3724.

23

24

25

Q.

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1
              MS. FORREST: We have only one piece of an objection
2
     to DX3478, Your Honor. To the bottom portion of the email.
3
     There is a couple of statements from Mr. Spencer. It would be
4
     hearsay if they are being used for a nonhearsay use and there
5
     would be no objection.
6
              MR. DOREN: So stipulated, Your Honor.
7
              THE COURT: So ordered. Admitted.
8
             (Defendant's Exhibit 3478 received in evidence)
9
              MR. DOREN: And since I stammered there a little bit,
     I will formally move 3478 into evidence, please.
10
11
              THE COURT: I thought that is what we were talking
12
     about.
13
              MR. DOREN: That is what I was trying to do.
14
     BY MR. DOREN:
15
         Mr. Sweeney, do you have Exhibit 3724 in front of you?
16
     Α.
        Yes.
17
         And do you recognize this to be an article that you posted
     on your website on August 20, 2020?
18
19
     Α.
         Yes, Epic did.
20
        And it's entitled, Join the Battle and Play in the Free
21
     Fortnite Cup on August 23, correct?
22
     Α.
         Yes.
23
     Q. And if you look, please, on the second page of this -- and
24
     by the way, this is another caricature of the artwork here
25
     that refers to Apple, correct?
```

SWEENEY - CROSS / DOREN

A. Yes.

- Q. And if you look at the first full paragraph on the second page you state that if you're left behind on iOS after the Chapter 2, Season 4 launch, the party continues on PlayStation 4, Xbox 1, Nintendo Switch, PC, Mac, GeForce Now, and through both the Epic Games app and the Samsung Galaxy store, correct?
- A. Yes.
- **Q.** And you were inviting people or suggesting to people who played on iOS devices that they could move over to any one of these other platforms to continue to pay -- to play Fortnite and to pay for in-app purchases, correct?
- A. With respect to the first part, yes. This makes no reference to in-app purchases.
- Q. Well, sir, certainly players could make in-app purchases on each of those platforms, correct?
- A. Yes.
- Q. And if you turn, please, to page 6, and you state do you only play *Fortnite* on mobile and are worried about not being able to play Chapter 2, Season 4? Here is a couple of things you can do.
- And then you provide step-by-step instructions on how people can play on other devices than their iOS device, correct?
- A. Yes.
- Q. And you state in paragraph 2 that iOS players should

check this list of alternative *Fortnite* compatible devices you
may already have access to another way to play *Fortnite*. If
so, simply install the game and log in with your Epic account

A. Yes.

to get up and running, correct?

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- Q. And you were telling them that because you knew that that was relevant to a lot of Epic game players, correct?
 - A. I think we were just helping our customers find a way to continue playing.
- Q. And, Mr. Sweeney, in December 2020, Epic began to sell V-Bucks on its own website, true?
- 12 \blacksquare A. I don't remember the date, but I know that we do now.
- Q. And that's been going on for the last several months, whether December 2020 or some other starting date, correct?
 - A. Yes.
 - Q. That was not going on as of August 13, 2020, true?
- 17 A. That's right.
- Q. iOS players never had the option of purchasing V-Bucks directly from the Epic website, correct?
- 20 A. That's right.
 - Q. So currently, though, anyone with access to a web browser can buy V-Bucks from the Epic websites, right?
- 23 **A.** Yes.
- Q. And we talked about friction of transactions and things, but if you go in and you buy V-Bucks on the Epic website and

- then put them in your V-Buck account, you then have cash on hand, if you will, when you go in and play your next game, correct?
 - A. Yes. With the exception of PlayStation and Nintendo Switch.
 - Q. Because they still won't let V-Bucks purchased, even from your website, on to their platforms, correct?
 - A. Correct.
 - Q. Now today, though, today, an iPhone user can use the Safari browser on their iPhone to go in and buy V-Bucks, correct?
- 12 **A.** Yes.

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- Q. And those V-Bucks will be waiting for them when those players go on to their Xbox to play *Fortnite*, correct?
 - A. Yes.
- Q. And Apple doesn't earn any commission on those transactions, right?
- 18 A. Correct.
- 19 Q. Because they take place outside of the App Store, correct?
 - A. Yes.
- Q. So if Fortnite were still on the iPhone, those players
 would have the option of making those very same transactions
 to purchase those very same V-Bucks to recharge their very
 same Fortnite account, but then play it on the phone, correct?
 - A. Yes, they would have that capability.

```
1
              THE COURT: Before you leave this topic, Mr. Doren.
2
         Why wasn't that an option before August of last year?
3
              THE WITNESS: Your Honor, it wasn't a very attractive
4
     option to our customers to --
 5
              THE COURT: Did you have the technological ability to
     do it, or you hadn't programmed that yet?
6
7
              THE WITNESS: Yes, we simply hadn't programmed it.
8
              THE COURT: But it was an option for you, you just
9
     chose not to do it?
10
              THE WITNESS: Yes.
11
              THE COURT: All right. Go ahead.
12
              MR. DOREN: Thank you, Your Honor.
13
     BY MR. DOREN:
         And when Epic sells V-Bucks from its own website, it does
14
15
     not pay a commission to anyone, does it?
16
     Α.
        That's right.
17
         And nonetheless, Epic sells V-Bucks on its website for the
     same price that it charges across all other platforms on which
18
19
     Fortnite is currently played and on which people can currently
20
     buy V-Bucks, correct?
21
     A. Yes.
22
              THE COURT: All right. I have two documents, DX3774
23
     and 3724?
24
              MR. DOREN: I would move them both into evidence,
25
     Your Honor.
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1
              THE COURT: Hearing no objection --
              MS. FORREST: Well, let me just -- I am sorry, Your
2
3
     Honor.
             37 --
              THE COURT: 74.
 4
 5
              MS. FORREST: -- 74, we have -- there is one word
6
     that I want to talk to Mr. Doren about -- just literally one
7
     word -- that -- before it goes up in the box, I would like to
8
     ask if he and I could agree that it gets blacked out. But we
9
     have no objection to the document otherwise being received
10
     into evidence.
11
              MR. DOREN: Your Honor, I ask we handle this the same
12
     way as the other document: Admit it now. We will confer and
13
     the Court can decide.
14
              THE COURT: That's fine. 3774 is admitted with that
15
     reservation.
16
             (Defendant's Exhibit 3774 received in evidence)
17
         3724?
              MS. FORREST: No objection, Your Honor.
18
              THE COURT: That's admitted.
19
20
            (Defendant's Exhibit 3724 received in evidence)
21
              MS. FORREST: Same issue with the 3774, that it won't
22
     go up to the box until we have conferred. Thank you.
23
              THE COURT: Again, I need to know by lunch.
24
              MS. FORREST: Yes, Your Honor.
25
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BY MR. DOREN: 1 2 Mr. Sweeney, you use an iPhone, correct? 3 A. Yes. 4 People have given you -- particularly I would think a Q. 5 person in your position, people have given you Android devices, correct? 6 7 Α. Yes. 8 And you've given those away, right? I have. 9 Α. 10 Q. You prefer the iPhone? 11 A. Yes. 12 You love the aesthetics of the hardware, true? 13 Α. Yes. 14 You like the operating system, correct? Q. 15 I like many aspects of the operating system. Α. 16 And you believe that the iPhone is a premium product, 17 correct? 18 Α. Yes. 19 And you understand that user privacy and security are 20 fundamental competitive differentiators for Apple, correct? 21 Yes. Α. 22 And you personally prefer to use iPhone because Apple's 23 approach to maintaining your privacy, Mr. Sweeney, is superior

24

25

Α.

to Google's, correct?

That's among the reasons.

1	$oldsymbol{Q}_{oldsymbol{\cdot}}$ And among the reasons that you use an iPhone is because
2	Apple's approach to customer data security is superior to
3	Google's as well, correct?
4	A. Yes.
5	Q. And when I say "Google," you understand I'm referring
6	generally to the Android devices, correct?
7	A. Yes.
8	$oldsymbol{Q}_{oldsymbol{\cdot}}$ And you value those qualities, the safeguarding of your
9	privacy and your data, true?
LO	A. Yes.
L1	Q. And if Apple were to compromise those fundamental
L2	differentiators, it would lose a significant competitive
L3	advantage over Android devices, wouldn't it?
L 4	A. I think I would need to know about specific changes it
L 5	would make to judge whether they would make the platform more
L 6	or less competitive.
L7	MR. DOREN: Thank you, Your Honor. I pass the
L8	witness.
L 9	THE COURT: Okay. Redirect.
20	We will go, Ms. Forrest, for another eight minutes before
21	our break.
22	MS. FORREST: Thank you, Your Honor.
23	REDIRECT EXAMINATION
24	BY MS. FORREST:
25	Q. Good morning, Mr. Sweeney.

- A. Good morning.
- Q. Mr. Sweeney, you had mentioned yesterday that you founded Epic in 1991, or the predecessor company to Epic?
 - A. Yes.

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- Q. And what is the name of the entity that Epic became today?
 - A. It's now Epic Games Incorporated.
 - Q. Okay. What is the entity that has sued Apple today?
- A. Epic Games Incorporated.
- 9 Q. Does Epic Games Incorporated have any relation to the
 10 Unreal Engine?
- 11 **A.** Yes.
- 12 \square Q. What is that relationship?
- 13 A. We are the -- Epic Games developed the *Unreal Engine*.
- 14 Q. And does the entity that sued Apple have any financial
- interest in the entity that owns the *Unreal Engine*?
- 16 A. Yes. It's all 100 percent owned.
- 17 **Q.** And is the *Unreal Engine* distributed on iOS?
- 18 \blacksquare A. Facets of the *Unreal Engine* are distributed on iOS.
- Q. And for how long have facets of the *Unreal Engine* been distributed on iOS?
- 21 A. I believe for at least two years.
- Q. Are there currently -- are facets of the *Unreal Engine* currently distributed on iOS?
- 24 **A.** Yes.
- 25 \mathbf{Q} . Is there competitive game play in the facets of the *Unreal*

- My understanding is four years. Α.

24 0. All right. Let's -- Mr. Doren asked you some questions 25 about a 60/40 revenue split yesterday.

SWEENEY - REDIRECT / FORREST

Do you recall those questions?

A. Yes.

- Q. And there were questions about a publisher split of 60/40.

 Do you recall that?
- A. Yes.
- **Q.** Can you describe to the Court the difference between what a publisher revenue split means versus a distributor revenue split?
- A. Certainly.

A publisher is a full-service entity that provides often development funding, funds and marketing of the game, manages the marketing of the game, and covers all the costs of manufacturing and distribution; whereas a distributor is generally a company that only facilitates distribution, meaning giving the physical product or digital product from the seller to the buyer.

- Q. And how does the cost structure of being a publisher relate, if at all, to the commission structure that a publisher -- that Epic as a publisher has previously entered into?
- A. Publishers generally, they are the majority of the cost of all creation and distribution of a piece of software. So a publisher will have a significantly higher cost structure than is a distributor and the publisher royalty rates paid to developers and the distributor commissions generally reflect

SWEENEY - REDIRECT / FORREST

that.

- Q. And specifically with respect to the companies that Epic has published games with reference to, and that Mr. Doren talked about yesterday with the 60/40 split, what services did Epic provide?
- A. Epic, in many cases, provided funding for the development of the product. Epic created the marketing materials. Epic often ran advertisements. Epic covered and actually manufactured floppy disks and packages to send to customers. And Epic worked with distributors, third-party companies, that helped to facilitate distribution of the software to users.
- **Q.** And are those services that Epic provided as publisher the same or different from the services that Epic provides in the Epic Games Store as distributer?
- A. No. Services of Epic Games Store is a digital distributor are entirely different than the services Epic provides and has provided to developers as a publisher.
- Q. Yesterday you were asked about the -- Epic's interest -- strike that.
- Mr. Doren asked you some questions about the rate of commissions that the console makers charge Epic.

Do you recall those questions?

- A. Yes.
- Q. Okay. And do you know what rate Microsoft charges any other company that distributes -- for which it distributes

games?

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- A. No. Epic is generally not party -- or privy to terms of Microsoft deals with companies other than Epic and their subsidiaries.
- Q. Do you know whether or not Microsoft charges any companies less than 30 percent?
 - A. No.
 - Q. Do you know what rate of commission Nintendo charges any company other than Epic for the distribution of its apps?
 - A. No. Epic isn't privy to third-party Nintendo deals.
- Q. Do you know whether or not Nintendo charges any companies less than 30 percent?
- 13 A. I don't know.
- Q. Do you know the terms of any commissions that Sony charges any other company other than Epic?
- 16 A. No, except for Epic's subsidiaries.
 - Q. Do you -- putting aside any Epic entity, do you know the terms of any Sony commissioned structure with regard to third-party companies?
 - A. No.
- Q. Do you know whether or not Sony charges any company other than Epic or its subsidiaries less than 30 percent?
 - A. I don't know.
- Q. You discussed earlier that Apple does not negotiate the terms of its agreements.

1 Do you recall that? 2 Α. Yes. 3 Do the console makers negotiate terms of their agreements with Epic? 4 5 Α. Yes. 6 Can you describe -- let's just take Microsoft as an 7 example. Describe generally the process by which some of that 8 back-and-forth may occur. 9 There would be significant negotiations around the wide 10 range of topics ranging from Microsoft marketing support of 11 our products to technical issues and policy waivers. 12 Q. And do those terms and conditions as a whole impact in any 13 way the various terms of the commission structure? 14 MR. DOREN: Objection. Foundation. 15 THE COURT: You can answer with respect to Epic. 16 BY MS. FORREST: 17 With regard to Epic. I am sorry. Could you repeat the question? 18 Yes. 19 Q. 20 Do the negotiations that Epic has with the console makers 21 as a whole impact the commission structure that Epic enters 22 into with those console makers? 23 A. No. Epic has not negotiated commission structures -- has

console makers to my knowledge.

never negotiated a different commission structure with the

24

1 Q. Let me sort of ask the question differently. Does Epic 2 negotiate a variety of terms and conditions with the console 3 makers? Yes. 4 Α. 5 And does Epic look at its agreements holistically with the 6 console makers? 7 Α. Yes. 8 Q. Does Epic's holistic review of those agreements impact all 9 of its decisions on the terms and conditions that will be 10 acceptable to it? 11 Α. Yes. 12 Is that true with regard to Microsoft? 13 A. Yes. 14 Is that true with regard to Nintendo? 15 Yes. Α. 16 Is that true with regard to Sony? 17 Α. Yes. THE COURT: All right. That sounds like a good 18 19 breaking point. 20 MS. FORREST: Thank you, Your Honor. 21 THE COURT: Stand in recess for 20 minutes. I'll see 22 you at 10:35. 23 (Recess taken at 10:17; resumed at 10:35 a.m.) 24 THE CLERK: Remain seated. Come to order. 25 THE COURT: Okay. We are back on the record. The

1 record will reflect that Mr. Sweeney is on the stand. 2 Ms. Forrest, you may resume your redirect. MS. FORREST: Thank you, Your Honor. 3 BY MS. FORREST: 4 5 Mr. Sweeney, you were asked some questions yesterday about sideloading apps on to consoles. 6 7 Do you recall those questions? 8 Α. Yes. 9 All right. Can -- are you familiar with the phrase 10 "general purpose device"? 11 Α. Yes. 12 Is a console a general purpose device? 13 Α. No. 14 Does -- how would you describe a console that is distinct, 15 if it is, from a general purpose device? 16 A console is a fixed function device that is used 17 primarily in conjunction with a television for gaming and 18 other television-based entertainment experiences. 19 Q. And does the fact that a console is a general purpose 20 device have any implications insofar as you think about 21 sideloading on to a console? 22 Α. Yes. 23 Could you please describe that for the Court. Q. 24 Generally with a fixed-function device, a user doesn't 25 expect the ability to plug in a keyboard or program it or

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1
     install software from other sources, whether it is a console
2
     or a thermostat or some other single-purpose device.
3
        If a banking app were loaded on to a console, could the
     console then be utilized in somebody's doctor's office, if
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5
     they went for a doctor's appointment, with that banking app?
6
              THE COURT: I don't understand that question.
7
              MS. FORREST: Strike that. That question was poorly
     formed, Your Honor. I apologize.
8
9
     BY MS. FORREST:
10
        Are you familiar with apps that relate to banking
11
     functionality?
12
     A. Yes.
13
        Is a console what you would consider to be a portable
14
     device?
15
     Α.
        No.
16
     Q. If there was a banking app on a console, would you be able
17
     to utilize it in your doctor's office to access the banking
18
     functionality?
19
     A. No.
20
              THE COURT: I still don't understand. You mean as
21
     opposed to going to the website where --
22
              MS. FORREST: The distinction --
23
              THE COURT: I mean, because we can access our bank
24
     accounts on our computers. We can access them on our mobile
25
     devices. So what is the point?
```

MS. FORREST: The point, Your Honor, is that the console is not a substitutable device in the doctor's office for utilizing functionality for many types of apps. Our contention in this case is that all apps are at issue, including things — the distribution of all apps is at issue, not just a game app; and, therefore, the distinction is relevant.

THE COURT: Okay. You can answer the question. I mean, I can still access my bank account on both devices so I really don't understand the point, but answer the question.

BY MS. FORREST:

- Q. All right. Mr. Sweeney?
- A. Well, you can't bring a console with you in the mobile situation. And a console doesn't include a keyboard as a standard feature. So it would be very hard or impossible to use it as a general computer.
 - Q. You've got a couple of consoles that were introduced into evidence yesterday. And they are, I think, right near you on the stand. Do you see them?
 - A. Yes.
- Q. And do you recall what their names are?
- A. Yes. It's a PlayStation 5, an Xbox series X, and a Nintendo Switch.
- Q. All right. If the PlayStation -- do you have a PlayStation in your own home?

- SWEENEY REDIRECT / FORREST 1 A. Not currently. 2 Do you have a PlayStation at your office? 3 A. Yes. And is the PlayStation, does it need to be plugged into 4 Q. 5 any kind of power source? 6 Α. Yes. 7 Are there any kind of controllers that are utilized with a 8 PlayStation? 9 Α. Yes. The game controller is a joystick. If you -- have you ever had occasion to use the 10 11 PlayStation in your office?
- 12 **A.** Yes.
- Q. And have you had occasion to use it with a joystick in your office?
 - A. Yes.

- Q. If you walked out of your office with a joystick, would you be able to play the PlayStation in an office on another floor?
- 19 **A.** No.
- Q. Same thing with regard to an Xbox, do you have an Xbox at the Epic offices?
- 22 **A.** Yes.
- Q. Have you ever had occasion to utilize the Xbox at the Epic offices?
- 25 **A.** Yes.

- 1 Q. Are there any controller devices associated with the Xbox?
 - A. Yes, there is a game controller.
 - Q. Is there a power source associated with the Xbox?
 - A. Yes. The Xbox must be plugged into the wall to function.
 - Q. If you had the Xbox plugged into the wall in one place within the Epic offices and then went two floors down in the Epic offices, would you be able to use the controller to manipulate that Xbox?
- 9 **A.** No.

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- 10 **Q.** Why not?
- A. You couldn't see the screen. And even when there is a wireless controller, it doesn't have that range.
- Q. I would like to hand you for demonstrative purposes an iPhone -- or a device.
 - MS. FORREST: May I approach, Your Honor?
- 16 THE COURT: You may.
- 17 **THE WITNESS:** Thank you.

BY MS. FORREST:

- Q. Can you identify the device and describe it generally for the Court, please?
- A. Yes. This is an iPhone. It's five or six inches in size.

 It has a touchscreen, a camera, and is connected to a cellular

 network.
- Q. All right. And I'm going to now hand you one of the devices that we talked about yesterday, the Switch.

1 And I've handed you two things that were associated with 2 the Switch that you identified yesterday. Can you describe 3 each to the Court in turn? 4 First, the one that has the colored pieces on either end, 5 what is that? 6 This is the Switch with the portable controller plugged 7 into it. And the other item is a game controller that can be 8 used when the Switch is plugged into a television. 9 All right. Is there a way in which the colored portions of the Switch hook into the game controller? 10 11 Α. Yes. They detach and plug into the game controller. 12 Could you detach them and plug them in now? Q. 13 Α. As you can see, I'm not Switch a player. THE COURT: Well, now the whole world knows. 14 15 THE WITNESS: Now the whole world knows. 16 THE COURT: That's all right. Neither am I. 17 THE WITNESS: Given some time, I presume I could. BY MS. FORREST: 18 19 Q. All right. Let me ask -- I think I can ask the question 20 just with the two pieces separately. 21 In a situation in which you are, for instance, sitting --22 do you ever have occasion to sit on a subway train or any kind 23 of commuter transportation? 24 Α. Yes.

All right. And if you were -- in instances when you are

SWEENEY - REDIRECT / FORREST sitting on a piece of commuter transportation, such as a train, have you ever had occasion to play a game on a mobile device? Α. Yes. Have you had the ability to manipulate the mobile device with a touchscreen? Α. Yes. And how many devices does it require you to hold at one time? Α. Just one. If you are on a train and you are manipulating the Switch device, how many devices would you or could you end up having

- On the train you could use the Switch with just the portable controller attached to it, so a singular device if
- And is there an instance in which if one wanted to use a game controller one would have to have more than one device?

you had a WiFi connection which the Switch requires.

- Yes. If you wanted to play with a full game controller, you would need to set the Switch down on a surface and then hold the game controller.
- Q. So if you were going to use the game controller with the Switch, you would have to be holding two devices; is that correct?
- Α. Yes.

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to control?

THE COURT: I thought the Switch had -- was all one 1 2 unit that you could --3 MS. FORREST: Right. THE COURT: So you don't --4 5 THE WITNESS: You can use the Switch just in this 6 mode by itself as a single device, Your Honor. 7 BY MS. FORREST: 8 Can you show the Court the second device that is used as a 9 game controller? THE COURT: Well, I understand, but that's just 10 11 additional functionality. I thought that was part of the 12 point of the Switch, is that it was pretty portable. 13 THE WITNESS: Yes, Your Honor. THE COURT: Proceed. 14 15 BY MS. FORREST: 16 Q. Are there any things that can be done with the controller 17 that cannot be done with the buttons? 18 Not to my knowledge. 19 Does the controller provide any additional ability to 20 manipulate any of the game play within the Switch? 21 I'm not sure. Α. 22 Now, you were asked some questions yesterday about your 23 speech at the DICE Summit in 2012. 24 Do you recall that? 25 THE COURT: It may feel like yesterday, but that was

1 this morning. 2 MS. FORREST: Sorry. 3 THE WITNESS: Yes. BY MS. FORREST: 4 5 You were asked some questions about the DICE Summit that 6 you spoke at in 2012, this morning. 7 Do you recall that? 8 Α. Yes. 9 Today -- at the time you sued Epic it was August -- sorry. 10 My goodness. 11 THE COURT: Just slow down. 12 BY MS. FORREST: 13 At the time, Mr. Sweeney, that Epic sued Apple that was 14 2020; is that correct? 15 Yes. August 13, 2020. Α. 16 Q. Are there any differences that you are aware of in the 17 industry that occurred between 2012 and the time that you sued 18 Apple in 2020? Yes. 19 Α. 20 Could you describe those for the Court? 21 We've seen enormous growth in the entire industry. Mobile 22 game development teams have grown from one or several 23 individuals to, in many cases, hundreds of developers. And 24 competition between different app makers has led to very 25

sophisticated app economics and costs of creating apps, such

1 that the economics that were in place in 2012 were very, very 2 different than the economics that are in place now. 3 Would you -- today, if you were to give a -- the same --4 to give a speech at DICE, would you give the same speech with 5 the same words? Α. 6 No. 7 MR. DOREN: Objection. Speculation. THE COURT: Overruled. 8 9 BY MS. FORREST: 10 Have you heard of the phrase "open platform"? 11 Α. Yes. 12 And is there any difference between what a cross -- what 13 cross-platform play is and an open platform? 14 Yes. An open platform is a platform where one is free to 15 install software from any source of their choosing. Generally a user has control over the device. 16 17 A closed platform is one where the user does not have that freedom. And even on a closed platform, it is still possible 18 19 to have cross-platform play between different devices and 20 different platforms with players from each different walled 21 garden connecting together into a shared experience. Those cross-platform play -- strike that. 22 23 Does the ability to engage in cross-platform play mean 24 that a platform is an open platform? 25

Α.

No.

1 Does cross -- the ability to engage in cross-platform play Q. 2 mean that a platform has an open distribution model? 3 Α. No. There has been some questions about Google Stadia. Do you 4 5 recall those questions? 6 Α. Yes. 7 Q. Do you know whether or not Google Stadia is in existence 8 today? 9 THE COURT: I -- are you sure you want -- well, I 10 don't know what the answer to that question is, but if he has 11 insider information about things in development, I don't know 12 how he is supposed to answer that question. So can you 13 rephrase it. 14 MS. FORREST: I believe, Your Honor, it has been 15 publicly -- there is a public -- I don't want to say anything 16 else. 17 I don't believe that I'm seeking any confidential information. 18 19 THE COURT: Okay. Go ahead. BY MS. FORREST: 20 21 Mr. Sweeney, are you aware of one way or the other as to 22 whether or not Google Stadia has been shut down? 23 A. My understanding is that after public launch, Google 24 Stadia has been very significantly scaled back.

All right. And you were shown Exhibit DX3199. Can we

- 1 bring that up on the stand -- on the machine? Do you recall questions on this document? 3 Α. Yes.
 - Q. When you were -- was this document reflecting an interview of you?
 - Α. Yes.

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- All right. What platforms were you referring to, if any, at the bottom of the page where you said it proves that developers have the real power in the industry and that where developers go, customers will go with them?
- Α. Yes.
- What platforms were you referring to?
- 13 I was referring to competition among PC stores. Α. 14 gamers would switch PC stores to go wherever developers went 15 with their game.
 - Was the topic of this interview involving iOS?
 - The topic of this question was not -- I do not see Α. anything in this interview pertaining to any level platform.
 - When the statement is made it proved that developers have the real power in the industry, do you believe that that statement is correct with regard to iOS?
 - Α. No.
 - Q. Why not?
 - Apple has complete control over what games and other apps can be distributed on iOS and wields that to make arbitrary

- policies and decisions such that Apple has all of the power 1 2 and control on the iOS. 3 In your experience, can developers move away from iOS 4 and bring their customers with them? 5 Α. No. 6 There were some questions about the Epic Games business. 7 When did Epic Games Store first have plans to include 8 nongames? 9 This is something we have been discussing since prior to 10 the public launch of the Epic Games Store in 2018. 11 And you described yesterday that there was nongame 12 functionality on Fortnite. 13 Do you recall that? 14 Α. Yes. 15 Was there nongame functionality on Fortnite prior to 16 August 2020 when this lawsuit was launched? 17 Yes. A. 18 When did the Party Royale first have nongame 19 functionality? 20 Sorry, Party Island had --Α. 21 Party Island, sorry. Q. -- functionality from the time that we introduced the 22 23 mode, and continued as we held concerts within it. I believe
 - Q. And when were concerts first launched within Fortnite,

that was late 2019 or early 2020.

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approximately?

- A. I don't remember the date of the first concert. The first concert was with the musician Marshmello. I believe that was early 2018 or early 2019.
- Q. And was that prior to the filing of the lawsuit?
- A. Yes.
- Q. Was there competitive game play at the Marshmello concert?
- A. No. When the concert began, there was just a pure entertainment experience, which you couldn't win or loose.
- Q. And you're also mentioned yesterday the *Creative Game* mode within *Fortnite*.
- A. Yes.
- Q. All right. When was --

THE COURT: Can I ask on that, when someone is a Fortnite user and they go to one of these concerts, they are still in their kind of Fortnite persona, aren't they? I mean, it is not like we're going on Zoom with friends and you see your friends and you go into a meeting room or something like that. People are there in their kind of game mode, aren't they?

THE WITNESS: Yes, Your Honor. People go into these concerts with the 3D avatar, a Marvel superhero or a giant banana, and they are participating in this virtual 3D space.

THE COURT: Right. So it still seems to me -- well, let me ask this: Do you have any data that suggests that

anybody goes to the concerts who aren't already just Fortnite 1 2 players? Isn't this just one more aspect of the game? 3 THE WITNESS: Well, Your Honor, we have seen a significant influx of people into Fortnite when we hold 4 5 concerts. And also a significant appearance of lapsed players 6 in Fortnite coming back for concerts? 7 THE COURT: But all in this kind of game situation, 8 right? I mean there are some movies about stuff like this, aren't there? 9 10 THE WITNESS: Well, Ready Player One is an example. 11 THE COURT: Because I'm not a gamer, that is the one 12 that comes to mind. And is it like that? 13 THE WITNESS: You know, I will just say metaverse science fiction portrays a realistic 3D world in which 14 15 participants have both social experiences, like sitting in a 16 bar and talking, and also game experiences, going on chases 17 and things. 18 THE COURT: But would that be -- because I haven't 19 seen any evidence yet presented in how this actually looks 20 in -- on your game platform, but would that movie kind of be 21 the most, you know, readily accessible analogy to what is 22 going on? 23 THE WITNESS: Yes. I think Ready Player One is a 24 great movie example. There is also Snow Crash, the book, 25 which kind of describes this emerging social entertainment

medium that transcends gaming.

THE COURT: But, again, the distinction is that they are going into these with their avatars, kind of in this gaming environment, and beyond doing competitions, then you provide other kind of experiences.

THE WITNESS: Yes. Yes. All in the virtual 3D world. You can stand there and watch Netflix with your friends, and it's different than watching it in front of the TV. You can talk to your friends and you can emote and throw tomatoes at the screen. And so it is a very different experience than either a game or Netflix.

THE COURT: But you still are monetizing that, you said, by offering people the ability to buy things while they are sitting there watching movies virtually together.

THE WITNESS: Yes, Your Honor.

THE COURT: All right. Go ahead.

BY MS. FORREST:

- Q. And the kinds of -- what are the kinds of things they can buy at a concert, for instance?
- A. Well, we typically -- around the time of the concert we will promote items associated with the musician, as well as like the Travis Scott concert included the skit or an outfit for Travis Scott. So did the Marshmello concert. Also have emotes that are relevant to the concert. And we have some that are kind of concert goer emotes of waving around blowing

sticks, for example.

- Q. And are you -- let me ask the question this way: Does an individual who has an avatar, do they have to engage in game play in order to attend a concert?
- A. No.

- Q. Does an individual who appears in the app as an avatar, do they have to engage in competitive game play to watch a movie?
- A. No.
- **Q.** Does an individual who appears in the app as an avatar have to engage in competitive play to create within *Creative Mode?*
- A. No.

THE COURT: You aren't making a distinction, though, in terms of competitive play. People play games all the time that aren't necessarily competitive, right?

THE WITNESS: Yes.

THE COURT: Or is everything -- I mean, I don't understand, you know, if you have your Switch -- I don't -- playing Candy Crush or something like that. You are playing a game. It is not necessarily competitive against other people; you are just playing a game.

THE WITNESS: Yes. And there are game mechanics, like a score or progression of some sort which isn't present in the concerts, Your Honor.

THE COURT: But that is not -- you aren't making a

1 distinction that somehow people have to be playing against 2 someone else. Is everything that you sell people playing 3 against each other? THE WITNESS: No, Your Honor. Within Fortnite, 4 5 Creative -- this is just a tool for creating your own Fortnite 6 island. There is nothing resembling a game mechanic at all. 7 It is more like a Barbie fashion designer but for the Fortnite 8 universe. 9 THE COURT: Right. And so it can be -- it doesn't 10 have to be competitive; it is just entertainment. 11 THE WITNESS: Yes, it is definitely entertainment. 12 **THE COURT:** In fact, how would you define a "game"? 13 THE WITNESS: I think game involves some sort of win 14 or loss or a score progression, on whether it is an individual 15 or social group of competitors. With a game you're trying to 16 build up to some outcome that you achieve, as opposed to an 17 open-ended experience like building a Fortnite Creative island or writing a Microsoft Word document. There is no score 18 19 keeping mechanic and you are never done or you never win. 20 THE COURT: All right. Keep going. BY MS. FORREST: 21 22 You were asked some questions about Metal. Do you recall 23 that, Mr. Sweeney? 24 Α. Yes. 25 All right. And Mr. Doren showed you a document that -- in

1 which you praised Metal in 2018. 2 Do you recall that? 3 A. Yes. When was Metal first released approximately, if you can 4 5 recall? 6 My recollection is in the 2014 time frame, but I'm not 7 certain. 8 So a couple of years at least before 2018? I think so. 9 Α. 10 Okay. Do you know whether or not Epic invested any 11 resources in improving Metal? 12 Yes. We worked very closely with Apple as we were 13 bringing up support for the Unreal Engine in Metal, and we 14 gave them feedback on improving their API, and they gave us 15 feedback improving our engine. 16 Q. And does the work that Epic did with regard to Metal, 17 along with Apple, is that limited to the benefit of Epic or 18 will it benefit others? 19 I think all of these efforts we did in partnership with 20 Apple benefits all developers. 21 Okay. And can we pull up DX3818. 22 And in this document, Mr. Doren pointed you to language in 23 the paragraph on the first page regarding competition across 24 platforms. 25 Do you see that?

- A. Sorry, what sentence?
- 2 Q. Right there, anywhere in there.
 - A. Yes.

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- Q. Why -- do you see that language that you were pointed to by Mr. Doren?
- A. Yes.
 - Q. Okay. And does it benefit Epic to have cross-platform competition?
- 9 **A.** Yes.
 - Q. Why?
- 11 A. Because competition ensures that users can get the best
 12 value, and the best products and companies have an opportunity
 13 to win on their merits.
- Q. Is there right now cross-platform competition that -with iOS?
 - A. No. Apple blocks iOS users into their platform and prevents competition in a lot of areas, including stores.
- 18 **Q.** Okay. You --
 - A. In other words -- I am sorry. You can't purchase a game on the Epic Games Store and then go to iOS, and if the game assist is also available on iOS -- you won't own the game on iOS. You'd have to buy it again through Apple's store. So there is no cross-platform competition in many product categories because Apple prohibits it.
 - Q. You were asked some questions about Apple's ARKit.

SWEENEY - REDIRECT / FORREST

1 Do you recall that? 2 Α. Yes. 3 Are you familiar with the term API? Q. A. Yes. 4 5 Is ARKit an API? Q. 6 Α. Yes. 7 Is that API available for native apps? Q. 8 Α. Yes. 9 Are you aware one way or the other as to whether or not 10 ARKit is available for -- through WebKit? 11 Yes, Apple does not make ARKit available through WebKit. 12 What is the significance of that? Q. 13 Α. It means that a web app cannot compete within a native app 14 in augmented reality, and can't generally even exist because 15 Apple prohibits AR from being used within the web browser, to 16 the extent -- to my knowledge. 17 Does that mean that a web app does not have access to 18 ARKit? Yes. 19 Α. 20 You were asked some questions about the trajectory of 21 Fortnite usage in 2020. 22 Do you recall that? 23 Yes. Α. 24 And you were asked questions specifically with regard to

the COVID period of time in 2020 and Fortnite usage.

1 Do you recall that? 2 A. Yes. 3 At the beginning of 2020, what was the trajectory of 4 Fortnite usage? 5 Fortnite was going strong in early 2020 in January, is my 6 recollection. 7 All right. Let's pull up DX3774 if we could. 8 Do you recall being shown this document by Mr. Doren? 9 Α. Yes. 10 All right. And if you turn, please, to the page that is 11 one, two -- three pages in, there is a page Bates numbered at 12 the bottom that ends at 765. 13 Do you see that page? 14 Α. Yes. 15 It says mobile platform fees, an existential issue as 16 Fortnite evolves. 17 Do you see that? 18 Α. Yes. 19 And did you see this page at the time that this 20 presentation was shown to the board of directors on or about 21 July 27, 2020? 22 Α. Yes. 23 And do you agree with the statement, Mobile platform fees, Q. an existential issue as Fortnite evolves? 24

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Α.

Yes.

Q. What is your understanding as to why mobile platform fees are an existential issue as *Fortnite* evolves?

A. These fees are an existential issue to the development of the metaverse in general. This is — and Fortnite is increasingly a creator of the new platform of companies and individuals besides Epic are creating content within Fortnite that they are working to distribute to users. And even though this is — we are early in the development of a creator-based Fortnite economy, the long-term evolution of Fortnite will be opening up Fortnite as a platform for creators to distribute their work to users and Epic is trying to build a metaverse in which creators can make the majority of profit from their own games and other entertainment experience within Fortnite, which means that, besides Epic paying all of its operating costs for Fortnite servers, the majority of the revenue from creator experiences in Fortnite should go to the creators themselves.

And with Apple taking 30 percent off of the top, they make it very, very hard for Epic and creators to exist in this future world.

Q. Let's pull up, if we could, DX4579, another document you were shown by Mr. Doren.

And I would like to turn you to the paragraph -- one of the parts of the document that Mr. Doren showed you, which is in the third paragraph on this page. And there's the sentence

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that says, Epic has certain plans for August that will provide an extraordinary opportunity to highlight the value proposition of consoles and PCs in contrast to mobile platforms and to onboard new console users. Do you see that? Α. Yes. Did you have any expectation at the time that you sent this email, which was 5 August 2020, as to the level of onboarding of new users that might occur? Given the data we had, my understanding is platform switching has been relatively modest, but we want to do everything we can -- we could to enable Fortnite players to find a new home. Were you expecting significant or insignificant onboarding of new users? I was expecting modest onboarding of new users. All right. You were asked questions about buying V-Bucks Q. through the Epic website. Do you recall those questions? Α. Yes. And your view is buying V-Bucks through the Epic website Q. an attractive option for consumers? Α. No. Q. Why not?

The time that people want to buy V-Bucks in Fortnite is

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when they see a new cool item in the Fortnite outfit shop. And at that point in time they are in Fortnite on some platform. And to set Fortnite aside, and pull out some device, go to the website, log in, and then make a transaction there is extremely inconvenient, versus a few taps on the screen using in-app purchase. So generally we have -- we appreciate that there is a huge amount of payment processing and customer friction associated with selling a user of an app an item outside of that app. And have you seen any data as to the numbers of purchasers who complete transactions in-app versus outside of the app? Α. I don't remember. Q. Okay. THE COURT: I have a follow-up on this too, Mr. Sweeney. What -- do you know the numbers in terms of the ages of the individuals who use Fortnite? THE WITNESS: We don't track customer age, Your Honor. **THE COURT:** So do you have an understanding generally whether a majority of the people who use your product are young people? THE WITNESS: We understand the majority of Fortnite players to be generally young adults, Your Honor. It's a teen-rated game, 13-plus.

1 **THE COURT:** So people -- so there's a substantial or 2 not a substantial number of children who are playing your 3 games? THE WITNESS: I don't know. We don't collect user 4 5 age as a matter of business practice. 6 THE COURT: Why -- why is this so inconvenient that 7 someone can't make, what I would call as a parent, an impulse 8 purchase? That is if I'm a parent and I say here is your 9 allowance and they choose to put \$10 or \$15 in V-Bucks in 10 their account, and they can use it when they want, isn't that 11 a responsible way to deal with a young client base? 12 Why should we want them to have impulse -- the ability to 13 just, on impulse, buy something? THE WITNESS: Your Honor, Fortnite has -- and most 14 15 platforms have parental controls preventing children from 16 making cash purchases. And so if a parent were to buy a child 17 V-Bucks, whether either in Fortnite on iOS or on our website, then the child has volition to spend the V-Bucks but not to 18 19 use the parent's credit card. 20 THE COURT: Right. But isn't that what you seem to 21 want here? I mean, people have the ability to have an 22 account. Right? You've got an account of V-Bucks, your 23 savings or whatever. What you are really asking for is the 24 ability to have impulse purchases.

THE WITNESS: Well, yes. Customer convenience is a

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huge factor in this. People are much more likely to make a purchase if it is easy to make a purchase than if it's very hard. THE COURT: Okay. Keep going. BY MS. FORREST: Mr. Sweeney, you were shown a document -- let's pull it up, 4477 -- by Mr. Doren. And also I talked to you about this yesterday. And you were pointed to various portions of this document. Let me ask you whether or not Epic is suing for damages in this case. Α. No. And would Epic have accepted a deal from Apple prior to the launch of the hot fix that related to relief just for itself and its concerns about Apple's policies? A. Yes. That is what Apple -- sorry. That's what Epic was asking for in this document. And if Apple had granted us permission, then we would have launched Fortnite direct payment with Apple's blessing. Q. Did Epic want a deal just for itself or for all developers? Didn't want a deal just for Epic. Expressed the hope that Apple would make these options available to all developers.

If Apple had told you that the deal would only be for you

and no other developers --

1 THE COURT REPORTER: Can you repeat? 2 BY MS. FORREST: 3 If Apple had told you that it would offer you a deal for you and no other developers, would you have accepted that 4 5 deal? 6 Yes, I would have. Α. 7 When did you first learn that the class action existed? 8 If you can recall? 9 Α. Referring to the consumer? 10 Q. Consumer class action or the developer class action. 11 Α. My recollection is a bit hazy, but I remember reading 12 about the Supreme Court matter on -- was it the developer 13 class action in 2018, I believe? 14 And remind the Court when you first distributed on iOS. 15 Α. I believe in March or April of 2018. 16 And remind the Court when you first distributed any game Q. 17 or product on iOS. 18 Sorry. 2010. Α. 19 And did Apple require Epic to enter into a developer 20 agreement at that time? 21 Yes. Α. 22 And you discussed that briefly with Mr. Doren yesterday. 23 Do you recall that? 24 A. Yes.

All right. Did Epic have any ability to negotiate the

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Q.

SWEENEY - REDIRECT / FORREST 1 terms with Apple, prior to entering into that agreement? 2 Apple's terms were nonnegotiable. 3 If Epic had not agreed to all of the terms in that 4 developer agreement, would Epic have been able to distribute 5 on iOS? 6 Α. No. 7 You also spoke briefly with Mr. Doren about communications 8 with Apple prior to filing the lawsuit. 9 Let me show you, if I can, a document, PX2374. 10 MS. FORREST: Your Honor, may I approach? And I will 11 also hand one to Your Honor and the clerks. 12 THE COURT: You may. 13 THE WITNESS: Thank you. 14 BY MS. FORREST: 15 Now, Mr. Sweeney, I don't expect that you've seen the top 16 email, but I'm interested in the portion of this document, 17 PX2374, that appears to have come from you. 18 Α. Yes. 19 What is this document? The portion that comes from you. 20 Α. This is an email I sent to Tim Cook at Apple suggesting 21 that Apple make iOS an open platform in 2015. 22 Q. And why did you send this email to Mr. Cook at that time? 23 My concerns with Apple's business model had been building

up for a period of several years, and Epic tried to arrange

conversations with Apple I think even prior to this but hadn't

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1 had a chance. So I sent Tim an email on the topic. 2 All right. Let me show you another document which has 3 been marked as --MS. FORREST: Your Honor? 4 5 **THE COURT:** Any objection? 6 MR. DOREN: No, Your Honor. 7 THE COURT: 2374 is admitted. I am assuming that is 8 what you wanted, Ms. Forrest? 9 MS. FORREST: It is, Your Honor. Thank you. (Plaintiff's Exhibit 2374 received in evidence) 10 11 MS. FORREST: I would also like to show the witness 12 what's been marked for identification as PX2421. 13 BY MS. FORREST: Mr. Sweeney, if you can let me know when you've had an 14 15 opportunity to review this document. 16 Yes, I've seen it. Α. 17 Okay. And there's portion of the document -- well, why don't you describe what the document is to the Court, please. 18 19 This is an email discussion between myself and Epic vice 20 president, Mark Rein, where we were attempting to set up a 21 meeting with Apple to discuss our concerns with iOS, in 22 particular in this case with Mr. Joswiak at Apple. 23 And why were you making that suggestion? 24 Our concerns were continuing to grow with Apple's business 25 model. We were at this point preparing to launch Fortnite on

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iOS, and I wanted to have an executive-level discussion with
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     Apple about the topic.
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              MS. FORREST: All right. Your Honor, I would like to
     move PX2421 into evidence.
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              THE COURT: Any objection?
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              MR. DOREN: No objection.
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              THE COURT: Admitted.
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             (Plaintiff's Exhibit 2421 received in evidence)
9
     BY MS. FORREST:
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         Mr. Sweeney, lastly, you were asked some questions
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     yesterday about -- or this morning about the Epic's June 2020
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     renewal of its agreement with Apple.
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         Do you recall that?
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     Α.
        Yes.
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         Was Epic able to negotiate the terms of that agreement
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     with Apple?
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     Α.
         No.
         If Epic had not agreed to the renewal agreement, what
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     would have occurred?
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        I believe our membership in Apple's developer program
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     would have expired, and Epic would be able to develop software
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     for at least iOS devices.
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              MS. FORREST: Thank you, Your Honor. I have no
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     further questions at this time.
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THE COURT: Recross limited to the scope of redirect.

SWEENEY - RECROSS / DOREN

MR. DOREN: Thank you, Your Honor.

RECROSS-EXAMINATION

BY MR. DOREN:

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- Q. Mr. Sweeney, first of all, regarding Metal, you're aware that an updated version of Metal was issued by Apple in 2017, correct?
- I don't remember it specifically.
- Q. You know that that API has continued to evolve and improve since it was first released in 2014, correct?
- Yes. Α.
- 11 Secondly, if you could please look at Exhibit 2374, which 12 you were just shown.
 - Do you have that?
- 14 Α. Yes.
 - This is your email to Mr. Cook. Do you have that?
- 16 Α. Yes.
 - And in the first paragraph, you state, in the second sentence, that the App Store has done much good for the industry.
 - And did you mean that when you made that statement in June 2015?
 - Α. Yes.
 - And looking at the last paragraph, you state that it would Q. be extremely positive for Apple to take this approach -- well, let's back up and just read the paragraph.

The paragraph starts, compliance review would keep iOS free of malware while open distribution would combine the best aspects of the App Store with the best aspects of open platforms. It would be extremely positive for Apple to take this approach proactively before this topic is overly complicated by opposing political, regulatory, moral, and competitive forces.

Did I read that correctly?

A. Yes.

- Q. So you understood that the way that the App Store was structured was, in part, impacted by competitive forces, correct?
 - A. My concern at this point in time was that it was not impacted by competitive forces.
 - Q. So even though you stated at the top it may have become overly complicated by opposing competitive forces, you did not, in fact, believe that the App Store was impacted by competitive forces by June of 2015; is that your testimony?
 - A. My concern at this point was that the iOS app distribution model was not subject to any competition whatsoever. That was my concern.
 - Q. Sir, I'm going to ask you to focus on my question please.

 You stated in your email to Mr. Cook that it would be

 extremely positive for Apple to take this approach before the

 topic is overly complicated by opposing competitive forces.

1 And you're telling us that despite having made that 2 statement in June 2015, your view was that there were no 3 competitive forces impacting the App Store; is that your 4 testimony here today? 5 Α. Yes. 6 Q. Thank you. 7 And, Mr. Sweeney, the -- for Fortnite, iOS is accounting 8 for about 5 and a half percent of total Fortnite revenue 9 through 2020, correct, since launch? 10 Α. I'm not certain. 11 You know it is well below 10 percent, though, aren't you? 12 Α. Yes. 13 MR. DOREN: Your Honor, I failed to move Exhibit 4036 into evidence previously, I believe. And I would like do that 14 15 now. 16 THE COURT: I had it as admitted. If not, it will be 17 admitted. (Defendant's Exhibit 4036 received in evidence) 18 19 MR. DOREN: Thank you, Your Honor. 20 And then secondarily I have --21 MS. FORREST: Before we move, before I forget, 4036, 22 I don't think it had been formally offered, Your Honor. The 23 only thing that I had on that one was an objection to the top 24 portion of the email as hearsay if it was being offered for a

nonhearsay use, then we have no objection. The top portion is

1 from an outside third party, Mr. Phil Spencer. 2 MR. DOREN: Again, Your Honor, it's just a statement 3 of Mr. Spencer's position in this document. Whether he is telling the truth or not, I will not guess. But this is the 4 5 position he took with Mr. Sweeney. 6 THE COURT: I'll admit it. If I hadn't before, I'll 7 admit it again, obviously follow the rules of evidence with 8 respect to its proper evidentiary value. 9 MR. DOREN: Thank you, Your Honor. 10 And then lastly, Your Honor, I want to hand up the thumb 11 drive that has the video clip on it. 12 THE COURT: You can give that to Ms. Stone. 13 MR. DOREN: Thank you, Your Honor. 14 **THE COURT:** Redirect limited to the scope of recross? 15 MS. FORREST: I have no further questions, Your 16 Honor. 17 THE COURT: Okay. I have a few. 18 **EXAMINATION** THE COURT: Mr. Sweeney, do you have any 19 20 understanding of the economics of developers who engage in 21 apps that relate to food? 22 THE WITNESS: No, Your Honor. 23 THE COURT: Do you have any understanding of the 24 economics with respect to developers who have apps related to 25 maps or GPS or traffic?

1	THE WITNESS: I do not.
2	THE COURT: Same question with respect to coupons and
3	incentives?
4	THE WITNESS: None, Your Honor.
5	THE COURT: Same question with respect to weather?
6	THE WITNESS: No, Your Honor.
7	THE COURT: Same question with respect to dating?
8	THE WITNESS: No, Your Honor.
9	THE COURT: And same question with respect to instant
10	messengers?
11	THE WITNESS: No, Your Honor.
12	THE COURT: Okay. So you don't have any idea how
13	what you are asking for would impact any of the developers who
14	engage in all of those other categories of apps; is that
15	right?
16	THE WITNESS: I personally do not.
17	THE COURT: Okay. And then just a few minutes ago,
18	Ms. Forrest asked you a question about your perspectives in
19	2012 when you gave that speech at DICE versus now. And you
20	talked about the growth in the entire industry, and in
21	particular the mobile game $$ the developments in the mobile
22	game industry. You gave some numbers.
23	Apple also participates in that industry, right? That is
24	they have their own gaming store, too, don't they?
25	THE WITNESS: Are you referring to the iOS App

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Store, Your Honor?
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              THE COURT: I'm talking about games in particular.
3
              THE WITNESS: I see. Apple has -- hosts the App
     Store from iOS, so there are all kinds of apps, including
4
5
     games.
6
              THE COURT: Okay. I don't have anything else.
7
         Any follow up on my questions, Ms. Forrest?
8
              THE WITNESS: Your Honor, can I correct something I
9
     said to you earlier?
10
         You asked about age knowledge that Epic -- for new
11
     players, we ask for the players age. And if the player is
12
     under 13, then we implement child safety practices required by
13
     law. But we do not retain player age information outside of
14
     that process. I apologize.
15
              THE COURT: No, that's all right. Thank you for the
16
     clarification.
17
         Ms. Forrest, any?
              MS. FORREST: No follow-up, Your Honor.
18
              THE COURT: Mr. Doren?
19
20
              MR. DOREN: No, Your Honor. Thank you.
21
              THE COURT: All right, sir. You may step down.
22
              THE WITNESS: Thank you.
23
              THE COURT: Next witness.
24
         Wait, I did have another question.
25
         Mr. Sweeney, you are asking the Court for equitable
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1
     relief. So part of the equitable relief that I've already
2
     provided was to require that Apple keep the Unreal Engine
3
     open.
         What is your backup plan if I don't? What is your backup
 4
 5
     plan?
6
              THE WITNESS: If Epic -- if Apple's actions are
7
     lawful, then I acknowledge Apple would have the right to
8
     remove Epic from the developer program for any reason or no
9
     reason, and then it would be up to Apple to decide. If Apple
10
     cut us off, then we would have to live with that, without
11
     supporting the iOS platform.
12
              THE COURT: Okay. Thank you.
13
         Okay. Now next witness.
              MR. EARNHARDT: Good morning, Your Honor.
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15
     Earnhardt for Epic Games. We call Benjamin Simon.
16
              MS. FORREST: While they are getting their witness,
17
     Your Honor, I will just remove the equipment over by the stand
     so nobody trips on it.
18
19
         (BENJAMIN SIMON, called as a witness for the Plaintiff,
20
     having been duly sworn, testified as follows:)
21
              THE CLERK: Please be seated. Please state your full
22
     name and spell your last name.
23
              THE WITNESS: My full name is Benjamin Simon. And
24
     the last name is S-I-M-O-N.
25
              THE COURT: Good morning, sir.
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1 THE WITNESS: Good morning. 2 THE COURT: You may proceed. 3 DIRECT EXAMINATION BY MR. EARNHARDT: 4 5 Good morning, Mr. Simon. Where are you employed? Q. 6 A. Yoqa Buddhi Co. 7 Does Yoga Buddhi Co. go by another name? Q. 8 Α. Yes. We usually use the name Down Dog publicly. 9 Q. What kind of company is Down Dog? 10 Α. We are a small software company. 11 What does it develop? Q. 12 Α. We develop consumer applications for wellness practices, 13 primarily our yoga app. 14 Down Dog is an unusual name. Where does it come from? 15 Down Dog is a yoga pose. We also wanted to make my dog Α. 16 the icon for the app, so it helped make that make sense. 17 What is your title at Down Dog? Q. I'm the president and CEO. 18 Α. 19 Q. What year -- did you also found Down Dog? 20 Α. Yes. 21 Q. What year? We founded the company in 2015. 22 Α. 23 And what did you do before you founded Down Dog? Q. 24 I was a software engineer at Google for three years. I 25 worked on a small team that built what is now the current

- version of Google Sheets for two years, and then I worked on Google Maps for mobile.
- Q. How many employees does Down Dog have?
- A. Currently we have five full-time employees, including myself.
 - Q. And what are your responsibilities as CEO?
 - A. I oversee most of the operations of Down Dog, particularly anything involving the code and software, distribution side.
- 9 My cofounder handles some of the more purely business, admin kinds of things.
- Q. Are you involved in the -- in overseeing the distribution of your applications?
- 13 **A.** Yes.

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- 14 Q. Are you involved in overseeing customer support?
- 15 **A.** Yes.
- 16 Q. Are you in charge of setting Down Dog's pricing?
- 17 A. That's usually a conversation with me and my cofounder.
- 18 Q. Does Down Dog have a data analytics team?
- 19 **A.** No.
- 20 **Q.** Are you in charge of reviewing Down Dog's data analytics?
- 21 **A.** Yes.
- 22 \parallel **Q.** Do you do that in the ordinary course of your business?
- 23 **A.** Yes.
- 24 **Q.** What are Down Dog's products?
- 25 \blacksquare **A.** Currently we have five applications: Our yoga app; we

1 have a prenatal yoga app; a barre app, which is sort of 2 ballet-inspired fitness; HIIT, which is high intensity 3 interval training; and then most recently our meditation app. 4 THE COURT: My court reporter is shaking her head 5 because you are speaking too fast, Mr. Simon. 6 THE WITNESS: Sorry. 7 BY MR. EARNHARDT: 8 We will both try to go slowly. 9 Can you just explain generally what those apps allow users 10 to do? 11 Yes. When a user comes to the app, they can choose from a 12 variety of customizations. So, for example, in the yoga app, 13 they can choose the length of the practice they want to do, down to the minute, the pace, the level. They can choose 14 15 among different voices. They can choose to boost a certain 16 part of the practice to focus on a certain body area. 17 And then what Down Dog does is creates a custom workout for that user on demand and stitches together a single video 18 19 that appears to be basically a continuous fitness class. And 20 serves that to the user as instructional content that they can 21 do yoga or meditate or workout along with. 22 Okay. Roughly how many users take classes on Down Dog's 23 apps on a given day? We have about 150,000 practices completed across our apps 24

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on any given day.

- Q. And where do your customers access those Down Dog classes?
 - A. We have our native iOS app as well as -- or I guess for each of our five products, we have a native iOS app, a native Android app, and then we also have a full featured web application.
 - Q. For your native iOS app, where can your customers go to download it?
 - A. Only through the iOS App Store.
 - Q. How does Down Dog make money?

- A. We are a subscription-based service. So we offer a free trial that users just need to create an account to access, and then after two to three weeks when the trial is done, they have to subscribe in order to continue practicing in any of the apps.
 - Q. And just in general, how does the subscription work once the user has one?
 - A. Any subscription gives them access to all of the apps on all of our platforms. It's a monthly or a yearly subscription.
 - Q. And once a user agrees to a subscription, does it auto renew at the end of the period, or does the user have to resubscribe?
 - A. For a subscription it typically auto renews; although they can turn that off at any point. For the trial, there is no billing information taken ahead, so there is no auto renew --

or no auto billing of the first charge.

- Q. Where can a user purchase a subscription to Down Dog?
- A. Via in-app purchase on the iOS native app, or in-app purchases on the Android native app. And then we also offer subscriptions via our website where users can either use a credit card, which we process through Stripe, or they can also pay via PayPal on our website.
- Q. So for subscriptions purchased in the iOS app, what payment processor do you use?
- A. Within the iOS app, we are only allowed to use Apple's In-App Purchase system.
- Q. Did Down Dog have to take any steps to become eligible to distribute its apps in the App Store in iOS?
 - A. I believe we had to sign up as a developer, pay the \$99 developer fee and sign various agreements.
 - Q. And did you, in fact, sign the developer program license agreement?
 - A. I believe so, yes.
- Q. Were you able to negotiate the terms of that agreement?
- 20 **A.** No.

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- Q. Were you able to ask any questions about the agreement before you signed it?
 - A. Not that I recall, no.
- Q. Were you able to seek any exceptions to any of the terms within the agreement before you signed it?

- A. Not that I recall.
- Q. How did it work functionally?
- A. I believe it was all self-service through Apple's website, where we basically just clicked through and signed up.
- Q. Okay. Since launching Down Dog, have you had direct experiences with Apple's App Store policies and practices?
- A. Yes.

- Q. At a high level, without getting into the details now, what impact have Apple's App Store's policies and practices had on the price you charge your customers?
- A. At a high level, we have always discounted the website subscription by at least the 30 percent that Apple takes, passing on those savings to our consumers. So at a very high level, not being able to publicize that offer raises prices for our consumers. And along with that, we end up with fewer people subscribing.
- Q. You answered my next question, but at a high level, what impact have Apple's policies had on your ability to attract and maintain users?
- A. Yes. So generally when we have done pricing experiments, we found that around our current pricing, if we increase the price by X percent, we get roughly an X percent decrease in the number of subscribers. And then reversely, if we lower the price, that obviously changes at the extremes.

So at a high level we are losing, you know, the percentage

of users equivalent to the increased subscription price.

- **Q.** And what impact have Apple's App Store policies and practices had on your ability to provide customer service to your users?
- A. There are a couple of issues. One is simply the app-review process, which slows down our ability to release bug fixes and other improvements to our users, which creates customer service issues. Additionally a substantial customer service issue for us is that we can't issue refunds, or even cancel the subscriptions of users who subscribe via in-app purchases. So those customer support complaints are ones that we can't remedy.
- Q. So let's start by talking about pricing.
 You testified that you sell subscriptions both on the web and in your iOS app, correct?
- A. Correct.

- Q. How does your standard pricing compare between subscriptions purchased on the web versus subscriptions bought through the iOS app?
- A. For the past year the standard in-app price has been 59.99, as in \$60 per year or 9.99 per month. And then on the website it's been 39.99 per year or 7.99 per month, which we generally advertise as a 33 percent discount for the yearly one at least.
- Q. So just to make sure I have that right, the iOS prices

are 33 percent higher than the web prices?

A. The iOS prices are actually 50 percent higher because of the way that math works out. The web prices are 33 percent lower than the iOS prices.

The iOS prices are 50 percent higher than the web prices, which is the same as saying the web prices are 33 percent lower than the iOS prices.

- Q. Okay. And why is it that you charge more for subscriptions purchased in-app on iOS than on the web?
- A. Primarily it is because of the 30 percent commission that Apple takes. We see no reason why we should make more money on users who subscribe via our website. Additionally, we find there are other reasons that we think it is better for us and our customers to subscribe via our website. The lack of the ability to issue refunds and otherwise manage their memberships being the primary one, which is why we are okay actually even making a little less on the website purchases.
- Q. So who ultimately bears the cost of Apple's 30 percent commission on iOS from your subscription payments?
- A. I would say that our customers do.
- Q. Okay. Could Down Dog offer subscriptions only on the web and still offer an iOS app?
 - A. I'm not entirely sure. I believe it would at least be difficult in that we wouldn't be able to tell users how they can subscribe within the app. So if there was no subscription

- option within the app, that would be a rather confusing experience for users.
- Q. Could Down Dog offer an iOS subscription in the app without using Apple's in-App payment processor to avoid the 30 percent fee?
- A. No. That is exclusively forbidden.
- Q. Forbidden by what?
- A. The App Store review guidelines.
- Q. Do you like that policy?
- A. No, we do not.

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- 11 Q. Why did you agree to it?
- A. We have no ability to negotiate those terms, and we feel we can't grow our business without having an iOS native app.
 - Q. Does Down Dog even run discounted pricing promotions?
 - A. We do. Typically four times a year. It's typically Memorial Day, Labor Day, Cyber Monday, and New Year's.
- Q. Do you have a typical amount by which you discount the prices?
 - A. That has varied. It's typically between \$15 a year and \$24 a year. Most recently we did a promotion for New Year's in January where we offered the subscription at 14.99 per year.
 - Q. Why is it that Down Dog runs these pricing promotions?
- A. Generally we consider it part of our mission to provide specifically affordable wellness practices to the world. We

found that doing promotions have been an effective way to offer our product at a cheaper price to those who can't afford it.

- **Q.** And does Down Dog makes those promotional offers available for purchase on iOS?
- A. Typically we do not.
- Q. Why not?

A. There's two reasons. One is that at the time of a promotion, it is very confusing to be talking about two different prices. And when we discount the app that much, we really can't afford to give that much to Apple. I believe at the 14.99 per year price, if a user practices every day, we actually lose money just on the music licensing fees that we have to pay. So we really can't afford to give 30 percent.

Additionally, Apple's in-app payment system makes it somewhat difficult to change our prices. A change in price requires a new product, which requires a review by Apple, which requires an update. And so in particular if we want to do an experiment of prices or if we don't plan far enough ahead, it is very hard to do a sale of iOS.

- Q. Would Down Dog charge its customers less for in-app subscriptions on iOS absent Apple's policies?
- A. Yes, I think so.
- Q. Both when running a promotion and normally?
- A. Yes. I'm not sure if we would run the promotions on iOS

because of the other issues I just explained, but yes. 1 2 Let me just make sure I understand the economics. 3 Is there any change in content based on whether a user subscribes in iOS versus on the web? 4 5 No, there is not. Α. 6 And if the user subscribes in iOS and on the web, which 7 platforms can the user access the app? 8 Regardless of where they subscribe, they can access the 9 app on Android, iOS, or the web. 10 And for the user, which subscriptions are cheaper, web or 11 iOS? 12 A. Web. 13 Okay. So do all of your users, therefore, subscribe on 14 the web? 15 No. Among our iOS users, it is roughly 50/50. Α. 16 So 50 percent subscribe in the app on iOS for more? Q. 17 Α. Correct. How do you explain that? 18 19 Apple, in addition to prohibiting us from implementing an 20 additional payment method, does not allow us to direct users 21 to a separate payment method or even present a link to our 22 website. So unless we -- sorry. 23

The 50 percent of users who do subscribe on our website hear about that offer via email. However, email doesn't reach all users for a variety of reasons: Spam, just missing it.

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1 And so -- also some users will choose to subscribe before they 2 ever get that email. 3 So because we can't advertise the website offer within the app, we end up having -- again, roughly half of our users 4 5 subscribe the in-app purchase at the higher price. 6 That's correct. 7 So what is your view on that restriction? 8 I think it, again, increases prices for our users and 9 reduces the number of subscribers. For that particularly, we 10 also have evidence from the fact that on Android we do include 11 a link to purchase on our website. And on Android, only about 12 10 percent of our users choose to use the in-app purchase 13 option. 14 Okay. If you don't like the restriction that prevents you 15 from telling your users that you have lower prices elsewhere, 16 why did you agree with it? 17 We don't feel that we have any other choice. Α. I'm going to show you one document now. 18 Q. Okay. 19 Α. MR. EARNHARDT: May I approach Your Honor? 20 21 THE COURT: You may. 22 MR. EARNHARDT: Your Honor, I have a binder for you, 23 but I understand --24 THE COURT: That's fine.

BY MR. EARNHARDT: 1 2 If you could just turn to that binder to the document 3 labeled PX2790. 4 Α. Okay. 5 Do you recognize that document? 6 Yes. This appears to be the App Store review guidelines. Α. 7 Did you have to agree to the terms within this guidelines 8 in order to distribute your Down Dog products on Apple App 9 Store? 10 So I believe the developer agreement references the 11 quidelines, but I don't -- I know the guidelines are updated 12 pretty often. And I don't believe developers are notified 13 when it is updated or asked to re -- reagree to them. 14 Q. Do you have to comply with these guidelines as your 15 products are available in the App Store? 16 Α. Yes. 17 MR. EARNHARDT: Your Honor, I move to admit PX2790. **THE COURT:** Any objection? 18 19 MS. DEARBORN: No objection, Your Honor. 20 THE COURT: Admitted. 21 (Plaintiff's Exhibit 2790 received in evidence) BY MR. EARNHARDT: 22 23 Q. If you can turn to the page PX2790.10. 24 Α. Okay.

You see there is a section there 3.1.1?

- SIMON DIRECT / EARNHARDT A. 1 Yes. 2 That says In-App Purchase? Q. 3 Α. Yes. 4 Q. Are you familiar with that? 5 Α. I am. 6 What is it? Q. 7 This is the section that stipulates under what conditions Α. 8 developers are required to use the in-app purchase mechanism 9 and some of the rules surrounding that. 10 You see the last sentence reads apps and their metadata 11 may not include buttons, external links, or other calls to 12 action that direct customers to purchasing mechanisms other 13 than in-app purchases. 14 Do you see that? 15 Sorry, I recognize that language, but I don't see it. Α. 16 Should be the last sentence under the 3.1.1. Q. 17 A. Yes, I do. Has Apple enforced that policy as to Down Dog? 18 19 Α. Yes, they have. 20 Q. And how have they? 21 We have been rejected upon submitting new app updates that
 - A. We have been rejected upon submitting new app updates that have included the link. We have also been rejected for having an enter code field in our menu. We've also been rejected for a dialogue in our app that allows user to email us a message if they can't afford the subscription. And also a few times

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when the link in the app has been activated for a few days,

Apple has notified us after the fact that we have been in

violation of their guidelines.

- Q. Let's switch and talk about your Android app for a moment.
 You have an app that runs natively on Android; is that
 right?
- A. Yes, we do.

- Q. How, if at all, is Down Dog's Android pricing different from its iOS pricing?
- A. It is not different.
- Q. On the Android App are you able to tell users about the alternative web-based subscription option?
- saying that we violated their policies. However, at the time we didn't think their policies actually did prevent that.

 They did put us back in the store at that point. And they since revised their guidelines, but said they aren't going to start enforcing them until August of this year.

Yes. Google did remove us temporarily over last summer

- Q. And on your Android app, do you, in fact, tell users that a subscription is available through the web for a cheaper price?
- A. Yes, we do.
- Q. What percentage of Android users choose to subscribe on the web?
 - A. Roughly 90 percent.

- Q. So what does that mean for the average price that an Android user pays versus the average price that an iOS user pays? A. Given that it's roughly half and half on iOS, and the price difference is 33 percent, I think it must be around a 15 percent reduction in the average price paid on Android. So you charge the same price on both iOS and Android, but the average price the user actually pays is higher on iOS; is that right? Α. That's correct. And what is the cause of that phenomena? Apple's restrictions on telling our users about the website option from within our app. Okay. If someone were to tell this Court that Apple does not control how app developers charge their customers, because Apple developers like Down Dog can offer subscriptions sales outside of the app, how would you respond to that? MS. DEARBORN: Objection to the form of the question, Your Honor. THE COURT: Sustained as to form. BY MR. EARNHARDT: Do you believe you have control over how you charge your customers in iOS?
- Q. Why not?

No.

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1 Again, we are restricted in our ability to communicate Α. 2 with our customers from within our product. 3 Let's talk more about your subscriber numbers. 4 Have you taken any steps to determine exactly how Apple's 5 policies impact Down Dog's ability to attract new subscribers? 6 Α. Can you repeat the question? 7 Q. Sure. 8 Have you taken any steps to determine how Apple's policies 9 as compared to Android, for example, impact Down Dog's ability 10 to attract new subscribers? 11 When Google announced that they were going to essentially 12 implement the same policy and start enforcing it as Apple has, 13 regarding the mentioning of other payment options, we decided 14 we should find out what that was going to cost us in a year. 15 So we ran an experiment where for a small number of users we 16 did not include the link to purchase on our website, which 17 effectively made it equivalent to the iOS experience. When we did that, we saw, I think it was, like 55 percent 18 19 of users subscribed in-app, which roughly matches what we see 20 on iOS, versus the more normal 10 percent who choose the 21 in-app when they are provided the explicit link to purchase on 22 our website. 23 MS. DEARBORN: Your Honor, move to strike as 24 nonresponsive. This question was regarding Apple. The answer

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was regarding Epic.

MR. EARNHARDT: No, the question was what steps --

THE COURT: Sustained. You are going to have to restate your question, and listen to the question and respond to the question itself.

BY MR. EARNHARDT:

- Q. Have you taken any steps to determine how the presence or absence of a restriction on showing telling your users that they can subscribe on the web app impacts Down Dog's ability to attract new subscribers?
- A. That's a hard thing to measure directly on iOS because we are not allowed to include the link.
- Q. So on Android did you take any steps to determine what impact that would have?
- A. Yes. Should I repeat my previous statement?
- 15 Q. Please.
 - A. On Android last August we ran an experiment where for a small percentage of users we did not display the link within the app to purchase on our website, which made the treatment effectively the same as our normal iOS treatment. And what we found was, if we didn't include the link, we saw roughly the same proportion of subscribers using in-app purchases versus the website that we see on iOS, versus, as I said earlier, the -- only 10 percent that normally used the in-app purchase app on Android.
 - Q. And what impact did you see on overall subscription?

- A. Overall I believe there was a 28 percent reduction in the number of subscribers.
 - Q. So whether they described [sic] in the app or on the web, during this experiment you saw 28 fewer subscribers in total?
 - A. 28 percent fewer, correct.
 - Q. And to what did you attribute that?
 - A. I assume it's primarily just the higher price. Feasibly you could imagine that some users actually don't want to use Google in-app's billing system and would prefer to put in their own credit card information.
 - Q. I asked you some questions before about the impact of Apple's policies on customer service issues. I want to ask some more questions about that.

Who processes Down Dog's customers' purchases on iOS?

- A. Assuming you are referring to purchases made within the iOS app, it's -- Apple processes those payments.
- Q. Anyone else?
- A. No.

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- 19 **Q.** Why not?
- A. Again, it's forbidden for us to use another payment processor within our app.
 - Q. And does Apple charge a fee for the payment processing?
 - A. Yes. They take 30 percent. And I believe 15 percent after one year for recurring subscriptions.
 - Q. So on iOS, in the app, who collects the user's billing

information? 1 2 Apple. Although in reality I think it is they already 3 have the billing information. And who maintains and controls that billing information? 4 Q. 5 Α. Apple. 6 And who handles issues that later arise concerning billing 7 or refunds? 8 MS. DEARBORN: Objection, Your Honor. Basis for this 9 line of questioning. About Apple's internal policies? 10 THE COURT: You need to be next to a mic because we 11 can't hear you. 12 And second, keep your objections to legal objections. 13 don't need discussion. 14 Overruled. 15 You can answer with respect to what you know. And not 16 assuming, not guessing, know. 17 Go ahead. THE WITNESS: Sorry, can you repeat the question? 18 BY MR. EARNHARDT: 19 When your customers want a refund, who handles that on --20 21 in the iOS app? 22 Our customers often email us or message via the app, but 23 ultimately only the Apple customer service team can issue them 24 a refund if they purchased using in-app purchases.

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Q.

And why is that?

1	A. Apple doesn't include, as part of their in-app purchase
2	API, the ability to refund or suspend a user's subscription.
3	Q. Does that
4	THE COURT: Do you get your 30 percent back when that
5	happens?
6	THE WITNESS: I'm not sure if we get our 30
7	percent or wait. Sorry. Sorry, in what case?
8	THE COURT: Well, if Apple's processing the payment,
9	and you have to pay Apple 30 percent commission on
10	subscription, and they give a refund, don't you get your
11	30 percent back?
12	THE WITNESS: I assume you mean our 70 percent back?
13	THE COURT: Your 70 percent.
14	THE WITNESS: I believe that in the case of a
15	refund well sorry. In the case of a refund, they are
16	actually taking the money back from us, right.
17	THE COURT: So they have given you anyway, it's a
18	wash. You go back to the beginning.
19	THE WITNESS: Yes. We basically never received the
20	payment we never received the 70 percent that we would have
21	otherwise gotten if they issued a refund. And they I
22	presumably they don't receive their 30 percent either.
23	THE COURT: When someone asks for a refund, in what
24	period of time does that happen?
25	THE WITNESS: Meaning how long for them to get the

refund or when do they ask for a refund?

THE COURT: Do you have a policy about how -- when people can ask for refunds?

THE WITNESS: We don't have a public policy. Though in practice on our website if you go to our support page and you ask for a refund, if it has been within seven days of a monthly subscription payment or 30 days of a yearly subscription payment, you can get the refund all on your own without even talking to our customer service team. If it doesn't qualify for that, you can email our customer service team, and then sometimes we will issue a refund anyway, depending on the circumstances.

THE COURT: Okay. So the -- because you have such a short period of time for a refund, you might not -- there might not have been a transaction from Apple giving you your 70 percent, right?

THE WITNESS: Sorry, that is in the case -- sorry,
we -- that -- what I just spoke about was the case where they
made a website purchase that we are able to refund. In the
Apple case, we can't issue a refund, so all we can do is tell
the user to ask Apple for a refund.

My general understanding is that Apple typically doesn't do refunds unless it is -- has been within 24 hours of the payment.

So I agree, Apple also has a long delay before we actually

receive payments. Typically it is 45 to 60 days after the 1 2 payment, so I believe that is correct that we basically just 3 never receive the proceeds of payments that were refunded. THE COURT: And do you get monthly payments from 4 5 Apple? 6 THE WITNESS: We do. 7 THE COURT: Okay. And those transactions are for 8 things that happened 45 days prior? 9 THE WITNESS: Correct. 10 THE COURT: I see. All right. Thank you. 11 Go ahead. 12 BY MR. EARNHARDT: 13 Do you believe it's important to Down Dog's customer 14 service to be able to issue refunds when they are warranted? 15 Α. Yes. 16 And on iOS are you able do that? 17 Only if they purchased via our website. Α. Does that fact that you're not able to issue the refund 18 19 yourself for users who subscribe in the app ever cause 20 blowback to Down Dog's? 21 Yes. Α. 22 In what form? Q. 23 There are a variety of issues. The most common is users 24 who subscribe right before we either do a sale, or in the last 25 year we have actually done a lot of periods of making the app

completely free for the pandemic. In those cases, if the user recently made a payment and contacts us, we will just issue them a refund. In the Apple case, we can't do that.

There are also cases where users mistakenly try to purchase our sale price via the app. But not seeing the website discounted option, end up going through Apple's flow and purchasing at the full price, and then later complaining to us that they didn't receive the discount.

- Q. And when you receive these complaints from your customers for folks who subscribed in the iOS app, what do you do?
- A. Typically we apologize and give them directions for how they can request a refund from Apple's customer support. And we also tell them that they can tell Apple that we are totally okay with the refund.
- Q. In your view does that live up to the standard of customer service that you would want for your company?
- A. No.

- **Q.** Why not?
 - A. As I previously stated, we have a much more generous refund policy just in terms of the number of days since a payment. But more substantially that doesn't allow for any one-off scenarios where, for example, we make the app free for health care workers and therefore want to refund a health care worker --

That doesn't allow us to issue refunds for specific

reasons that Apple isn't going to understand. For example, the existence of a promotion that went into effect after a user subscribed. Would you handle payment processing --Sorry. Can I actually add one thing to that? Α. Of course. Q. It also changes certain decisions around, for example, removing features, where if we can't refund users who -- so, for example, we recently removed the ability to play practices offline because it was only used by half a percent of users. That half a percent of users might really care about that feature. And so if users complain about that, we'll typically refund them because we are no longer offering the exact product that they subscribed to. But, again, we can't do that if their subscription was made through Apple. Q. Again, why can't you? Because Apple doesn't allow us to. Α. Would you handle payment processing and billing and refunds differently for those folks who subscribe in the app in iOS if you could? Yes. Α.

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How would you handle it? Q.

We would give refunds the same way we do for our website purchases. I will also note that on Android we are able to issue refunds and we do so there.

1 Q. Let's talk about payment processing on the web. 2 Who processes customer purchases of subscriptions for Down 3 Dog's products when the user subscribes on the web? 4 The user has two options. They can enter their credit 5 card information directly, in which case it's processed by 6 Stripe. They can also use PayPal. 7 Okay. And on the web then, who collects the user's 8 billing information? 9 In PayPal's case it is completely within PayPal. 10 Stripe's case the credit card number is entered on to our web 11 page but is sent directly to Stripe. It never touches our 12 servers. 13 And who maintains and controls that information? 14 Α. Stripe and PayPal. 15 And who receives the payment in the first instance for web 16 subscriptions? 17 Sorry, I don't think I understand the question. 18 Do the payments go to Stripe and PayPal, or do they come 19 directly to Down Dog? 20 They go to Stripe and PayPal, and then those two companies 21 do payouts to us. 22 Now, on the web, can you issue refunds? Q. 23 A. Yes.

DIANE E. SKILLMAN, OFFICIAL COURT REPORTER, USDC

Can you cancel subscriptions?

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Q.

Α.

Yes.

1 Q. Can you provide direct customer service to your clients? 2 Α. Yes. 3 Why can you do that on the web but not on iOS? Q. There's no arbiter of what we are allowed to do on the 4 Α. 5 open web platform. 6 How does that change the customer service experience on 7 the web compared to iOS? 8 It allows us to provide a superior customer service 9 experience on the web. 10 Let's talk about credit security for one moment. 11 You mentioned this, but I just want to reiterate it. Do 12 the subscriber's credit card numbers ever reach Down Dog 13 servers? 14 No, they do not. Α. 15 And is that important to Down Dog? 16 Α. Yes. 17 Why? Q. That's obviously important information, which if it did 18 19 live on our servers we would have to obviously take many 20 precautions to make sure that information is secure. 21 believe there is specific legal regulations around credit card 22 information specifically, all of which is dodged by having 23 that information go directly to Stripe.

DIANE E. SKILLMAN, OFFICIAL COURT REPORTER, USDC

Have you ever had any type of security issue arising from

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web-based subscriptions?

- A. We have had a few users claim that their credit card information had been stolen, meaning like the person would put in their credit card information was committing fraud, but not as a result of anything on our part.
- Q. Let me ask a better question.

Have you had any type of security issue called by the fact that the user subscribed on the web as opposed to in the app in iOS?

- A. No, we have not.
- Q. Does Down Dog pay a fee in connection with the services that Stripe and PayPal provide?
- A. Yes, we do.

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- Q. And how much do you pay?
- A. I believe it's 30 cents per transaction, plus 2.9 percent.
- 15 It's slightly higher for transactions made not in United
 16 States dollars.
- Q. Now, in your view, taking into account all the various factors, who provides a better payment processing service,

 Apple or Stripe?
 - A. Stripe.
- Q. And in your view, taking into account all the factors, who provides a better payment processing service, Apple or PayPal?
- 23 A. PayPal.
 - Q. Now, assuming that Apple and Stripe services cost exactly the same, would you prefer to use Apple's payment processing

SIMON - DIRECT / EARNHARDT 1 service or Stripe's? 2 Α. Stripe. 3 Does Apple's in-app payment service provide anything of material value to you that you do not receive from Stripe? 4 5 It is perhaps slightly easier for users to go through the Α. 6 payment flow for in-app purchases versus having to look up 7 their credit card number, but besides that, no. 8 Q. Do you believe that justifies Apple's 30 percent fee 9 compared to Stripe's 3 percent fee? 10 Α. No. 11 In your experience has Apple applied its App Store 12 quidelines consistently and fairly? 13 A. No. 14 Have you ever offered free trials? 15 Α. Yes. 16 What are free trials? Ο. 17 When a user creates their account simply by providing their email address. They have free access to all of the apps 18 19 for a set period of time before we ever try to collect their 20 billing information. 21 Does Apple have policies regarding how free trials can be 22 conducted in iOS?

A. Yes.

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Q. And what is your -- has been your experience with those policies?

- A. Most notable last summer we were rejected several times with the reviewers telling us that we had to implement our free trial using in-app purchases, which would require that the trial would auto charge them at the end of the free period.
- Q. And can you just explain what that means, what would be required for the use of in-app purchase such that the user would be auto charged at the end of the period?
- A. So essentially after the user signs up before they could ever try out the app substantially -- you know, actually do a class, they would have to go through Apple's payment flow to subscribe the in-app purchases, though they are not actually charged until the free trial is done. They can turn off the free trial before and avoid charges; however, we can't provide a way for them to do that from within the app. They have to go into their Apple settings to disable that.
- Q. How did that compare to what you wanted to offer as a free trial?
- A. We wanted to offer a truly free trial where you didn't have to give us any payment information, and only after your free trial would we prompt you to subscribe.
- Q. And why did you prefer your type of free trial as compared to the one that Apple tried to impose?
- A. In general we don't really want to make our money from users who just forget to unsubscribe. We also experimented

with different types of free trials, primarily in the fall of 2018. And we found that for an auto-renewing trial, we had such a big reduction in the number of users who would actually do the trial that we ended up with fewer subscribers at the very end, even though more of the people who did the trial did, in fact, get charged at least once.

- Q. Who -- can you explain the process that a user must go through on iOS to unsubscribe before a free trial ends?
- A. I believe they have to go into their settings, like the main settings app on their phone. Then they have to click Apple ID. Then I believe there is a subscriptions button, and that takes them to a page that has all of their in-app subscriptions. And then they can click into the specific one, hit cancel and confirm.
- **Q.** And is there a time period within which the user must cancel the quote/unquote free trial before they will be auto charged?
- A. I believe Apple warrants that you should cancel 24 hours before the end of the trial. Typically those trials are something like seven days. In our case, we do a longer trial, but it is also not one of these auto-renewing trials.
- Q. Did you tell Apple you reviewed their restrictions on free trials as a problem?
- A. We did.

Q. And what was their response?

- A. They basically -- well, we actually didn't think we were in violation of their stated policy. The policy seemed to state that you could implement a free trial using in-app purchases but didn't seem to state that you had to. But they basically just doubled down and said, no, we were still in violation and we would need to change that.
- Q. And so what did you do in response?
- A. After waiting several days for a phone call from Apple, we tweeted a screenshot of the interaction we were having with them.
- Q. Why did you do that?

- A. I was pretty frustrated at this point. In particular this update didn't actually change anything about the free trial behavior. We had this type of free trial for years and actually just contained unrelated improvements and bug fixes. So in particular having to having to wait to release something unrelated for what I thought truly wasn't against the guidelines seemed unfair.
- Q. Did Apple do anything in response to your tweets?
- A. Yes. I believe four hours after we tweeted, we got a phone call from Apple.
 - Q. And what did they say?
 - A. I actually missed that first phone call, but the next morning they called back, and he told me that they had seen the tweets. They had reviewed the back-and-forths with the

1 reviewers. It had been escalated to a higher team overnight, 2 and they had decided that we were correct and the guidelines 3 didn't actually forbid us from doing this type of free trial. 4 Q. Did they then allow you to offer the free trial in that 5 way? 6 They did. Α. 7 Do you believe that there is a security risk in allowing 8 yoga users to take free trials without putting in their 9 billing information first? 10 Α. No. 11 Do you believe there is a -- there could be a business 12 risk for Apple if the user is allowed to take free trials 13 without putting in their billing information first? 14 MS. DEARBORN: Objection, Your Honor. Foundation. 15 THE COURT: Overruled. 16 THE WITNESS: Yes. 17 BY MR. EARNHARDT: Two years ago, would you have attempted to tweet the 18 19 interaction with Apple? I'm not sure. That was our first instance of doing that, 20 Α. 21 so probably not. 22 And why did you believe it would be successful now but 23 maybe wouldn't have been successful two years ago? 24 A. We had a substantially larger user base. I also thought

that this -- this issue in particular, I think users actually

1 hate auto-renewing trials. And so I thought this issue in 2 particular was something that we were likely to get users' 3 support for. 4 Q. And if you would not have been able to garner user support 5 and if Apple had not listened to your arguments, what would 6 you have had to do? 7 We would have had to implement the auto-renewing free 8 trial. 9 What are promo codes? 10 I suppose they are codes allowing either free access or 11 reduced price access. 12 Has Down Dog ever had promo codes in its app? 13 Α. We have. 14 Does Apple have policies relating to those? 15 Α. Yes. 16 And what was your experience with Apple regarding promo 17 codes in the Down Dog apps? At one point we were trying to get an update approved in 18 19 time for New Year's. Again, it was sort of an unrelated 20 update trying to launch an intro to yoga series that we had 21 developed. And we were rejected with the reviewer simply 22 asking what the enter code button in our menu was for. 23 We explained that we had used that at times to give free 24 access -- sorry. At the time we actually were not currently

using that. In the past we had used it to give free access to

students. But because we weren't currently using it, we decided the easiest thing was to just remove that button. So we resubmitted the app with the button removed. And then we were rejected again, this time being told that we hadn't responded to them telling them what the button was for, even though it was no longer present.

So we submitted again, putting back the button and explaining that we had used it to give free access to students, at which point we were rejected with them saying no matter what, you are not allowed to use codes.

- Q. And then what did you do?
- A. I believe then we removed the button, and it finally was approved.
 - Q. So Apple first approved the app with the promo code functionality, correct?
 - A. Right.

- Q. Then they rejected it?
- A. Yes. It was initially approved with the promo code functionality much earlier and had been probably multiple times approved in the store. But then on this unrelated update it was rejected, correct.
- Q. And then -- so you removed it?
- **A.** Yes.
- \blacksquare Q. But then they told you to put it back in?
 - A. Yes.

SIMON - DIRECT / EARNHARDT 1 Q. So that they could reject it? 2 Α. Correct. 3 Q. So that you could remove it? 4 Α. Correct. 5 And all of this happened under the same guideline? 6 Α. Correct. 7 Q. What is Apple Health? 8 Α. Apple Health is an app on iPhones that supports, among 9 other things, tracking your workouts, including the workouts 10 of third-party applications. 11 Do you integrate your apps with Apple Health? 12 Α. We do. 13 And what has been your experience with the app-review process relating to Apple Health integration? 14 15 We never had any issues for a long time; however, in the 16 past year there have been two instances where we were rejected 17 with the reviewer telling us that they couldn't find the Apple Health integration because we -- sorry, step back for a 18 19 second. 20 If you integrate with Apple Health, Apple requires you to 21 state that in your App Store description or else they will

If you integrate with Apple Health, Apple requires you to state that in your App Store description or else they will reject you. So in our App Store description we state that. However, iPads don't support Apple Health, which is entirely a decision of Apple's. So there is no integration if you are on an iPad.

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However, twice we were rejected by reviewers saying they couldn't find the Apple Health integration, and when we asked for screenshots, we saw that they were, in fact, testing on iPads. So we then had to explain to Apple's own reviewers that Apple has decided not to support Apple Health on iPads. Okay. And what was the impact on your business from these two rejections? A. Arbitrary delays to release unrelated updates. What is Sign in with Apple? Q. Sign in with Apple is Apple's third-party sign-in solution that allows other apps to have users authenticate via their Apple credentials. And what has been your experience with Sign in with Apple? So first of all, Apple requires developers who implement another third party log in solution, like Google sign in or Facebook log in are the two that we do to implement sign in with Apple. Sign in with Apple was only released I think two years ago, maybe not even, so that was only started -- sorry. The requirement to implement Sign in with Apple was only enforced starting this past summer. When we were told we had to implement it, we looked and we saw that Sign in with Apple is only supported on iOS Versions 12 and above. However, we support iOS versions down to 9.3. So we had several back-and-forths with Apple trying to explain that we couldn't

actually satisfy all their guidelines because we were

additionally required to support subscriptions on any Apple devices that our app was supported on.

They told us that the app review team was not technical and that we would need to contact Apple developer support to find out how to implement Sign in with Apple pre-iOS 12.

After a long back-and-forth, we basically decided it just wasn't worth it because they told us that we basically had to implement the solution ourselves using JavaScript. And then when we finally did implement Sign in with Apple, we were rejected because our log-in screen features — or at the time, featured a picture of someone doing yoga with a mostly brown background. And we were rejected because we used the black Sign in with Apple button, and there is a guideline that says that if you use the black button, it has to appear on a light background. And if you use the white button, it has to appear on a dark background.

- Q. So we've heard statements that Apple treats all developers equally, including for its own apps. What has been your experience?
- A. I think merely the fact there is an editorial team that chooses to feature some apps and not others makes it clear that Apple had no intention of treating all apps equally.
- Q. Did you attempt to offer free -- free classes during the COVID-19 pandemic?
- A. Yes.

- Q. Can you explain what happened when you tried to do that?
- A. Yes. We shortly before lockdowns actually started, we announced that we were going to make all of our apps completely free in March, and we eventually extended that through April as well. When we submitted our next update, we put in the release notes, the like What's New message, that all our apps were free during COVID—19 lockdowns through whatever date had been decided at that point.

We were rejected where they cited a rule around explicit or offensive or triggering language, telling us that COVID-19 was potentially triggering.

We then submitted another update where we just said free during lockdowns but didn't say COVID-19 explicitly. We were then rejected again and told that they had scheduled a phone call with us. The woman who called explained that we were allowed to say that it was free, but we were not allowed to allude to the presence — to allude to COVID in any way. So ultimately, we submitted an update that was approved.

And I believe the next day Apple released their own COVID-19 app, which allowed you to check your symptoms, which was featured front page of the App Store, which anyone would see upon opening the App Store.

- Q. And just to be clear, the Apple representative told you that the word "lockdown" would potentially be triggering?
- A. Correct.

- Q. How does Apple's free trial cancellation policy compare -for third-party apps, compare to the free trial cancellation
 policy on Apple's own apps?
- A. I'm not sure about all of their apps. I know that specifically for Apple TV+ and Apple Fitness+, if a user turns off their free trial they lose access immediately; whereas for third-party applications they retain access through the end of their trial period, even if they turn off the trial so that they are not auto charged.
- Q. And do you like that policy?
- A. No.

- **Q.** Why not?
 - A. Again, I'm not a big fan of auto-renewing trials to begin with, but I think the decision to revoke access immediately upon turning off auto renew makes it pretty clear that Apple is hoping to get some payments from users who otherwise would forget to turn off the auto renew.
 - Q. Does Apple restrict how you can use push notifications for marketing on your apps?
 - A. Yes.
- Q. Does Apple impose the same restriction on itself for Apple Fitness?
- A. I know I received at least two push notifications for Apple Fitness that were promotional.
 - Q. In your experience, has Apple treated all third-party app

1 developers equally? 2 Α. No. 3 Can you give me an example of why you believe not? 4 Α. Again, I think the most obvious example is just the mere 5 presence of the editorial team and the featured apps in the 6 App Store. 7 Do you know what a reader carve out is? 8 Α. Sorry. 9 Q. A reader carve out? 10 Α. Are you talking about the reader apps carve out? 11 Q. Yes. 12 Yeah. I believe there is an exception to the in-app --13 actually I'm not sure exactly what the rules are, but there is 14 a specific exemption for reader apps which are defined as -- I 15 think it was basically supposed to cover like ebooks 16 subscriptions and perhaps video library subscriptions, but 17 basically it was apps that were just for consuming content 18 across platforms, where there are modified rules around the 19 need for in-app purchases. 20 Are -- is Down Dog eligible for the reader carve out? 21 We have never been approved for that. We haven't sought it explicitly. I'm not -- I'm not entirely familiar with the 22 23 latest rules around what that carve out is. 24 So switching topics. You are a software engineer by

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training?

A. Yes, I am.

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- Q. And you worked in that capacity for several years at Google?
- A. Correct.
- Q. To have native apps on both iOS and Android, did Down
 Dog have to write software separately for each?
 - A. Yes. Although the majority of our code is shared, yes.
 - Q. And did you use Apple's API in order to create the software for your iOS app?
 - A. Yes, I don't believe it's possible to make an app, even open, on an iOS device without using Apple's APIs and SDK.
 - Q. Was there anything special about Apple's API or SDKs?
- 13 **A.** Not particularly.
- Q. Would you characterize them as average, below average, above average?
 - A. I would say average. We have implemented substantially the same functionality on web, Android, and iOS. And I don't believe any one of the three was substantially different.
- Q. Have you been happy with your experience distributing apps to the App Store and Apple's enforcement of its policies?
 - **A.** Not particularly.
 - Q. Why don't you just abandon App Store distribution?
- A. There is no other way for us to allow our users to access any iOS app.

- Q. And why does that matter to you?
- A. Need of apps provide the best experience for a lot of technical reasons around functionality and performance. It's also, for better or for worst, where users have learned to go. I think if a friend tells you about this thing Down Dog, they have been using on their phone, they are most likely to go search for Down Dog in the App Store.
- Q. Are you able to tell what type of operating system a customer uses to subscribe to your services?
- A. Yes.

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- Q. And can you tell what type of device a customer uses to take a class?
- 13 A. To some level of specificity, yes.
- Q. What percentage of Down Dog's revenues comes from iOS users?
 - A. It's roughly 50 percent; where iOS users refer to users practicing on the native iOS app but not necessarily purchasing with in-app purchases.
 - Q. In your experience, do users who take a class on the iOS app typically switch to taking a class on the web?
 - **A.** Typically no.
- Q. What percentage, if you know, of users that first take a class on iOS later take a class on the web?
 - **A.** I believe it's between 2 and 5 percent.
 - Q. Do users switch between taking a class on an iOS device

1 and taking a class on an Android device? 2 Α. No. 3 What percentage of users take a class on an iOS device 4 and then later take a class on an Android device? 5 I believe that number is 2 and a half percent. Α. And we've talked about this, but currently users can get 6 7 Down Dog's iOS only through the App Store, correct? 8 That's correct. Α. 9 If you were allowed to distribute your apps outside of the 10 App Store, would you do it? 11 I think it depends on the specific distribution method, 12 but we would certainly be open to it. 13 If the distribution method was similar to what is allowed 14 over the web, would you distribute your iOS differently --15 your iOS app differently on iOS? 16 Yes. Certainly if users could visit our website and 17 install directly from our website, we would support that. If Apple increased its commission on the App Store by 18 20 percent, would Down Dog then leave the iOS environment? 19 20 MS. DEARBORN: Objection, Your Honor. Calls for 21 speculation. 22 THE COURT: Lay some -- ask him if he has an opinion.

You are going to have to lay foundation for that.

MR. EARNHARDT: Okay. Sure.

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BY MR. EARNHARDT: 1 2 Are you in charge of determining where your subscriptions 3 are sold? 4 Α. Yes. 5 Does the pricing of those subscriptions impact where you 6 offer them? 7 A. Yes. 8 Q. Based on that, if Apple increased its commission on the 9 App Store by 20 percent, would Down Dog leave the iOS 10 ecosystem? 11 MS. DEARBORN: Objection, Your Honor. 12 THE COURT: Overruled. You can cross. 13 THE WITNESS: I think it is unlikely. I think it is more likely that we would increase the price on iOS. 14 BY MR. EARNHARDT: 15 16 If Apple increased the annual developer fee to \$200 17 instead of \$99, would Down Dog leave the iOS ecosystem? 18 Α. No. 19 Q. And why not? 20 Α. That fee is very small compared to our revenue. 21 And why isn't it sufficient for Down Dog to only be 22 offered on Android devices?

we've grown almost entirely by word of mouth. We have done

with iOS for any particular user. In our case specifically,

A. Again, there is very little cross over between Android and

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almost no marketing, which means users tell their friends and family about Down Dog. If half of their friends and family can't download Down Dog because they have an iOS device and not an Android, then that actually amounts to basically halving our growth rate, which is something that compounds over time. So it substantially reduces the ability for us to grow.

At some point I looked at the top 40 health and fitness apps, according to Apple's own top charts. And at the time only two of those top 40 did not also have an Android app, which suggests that it is very hard to be a popular consumer app while only supporting one platform.

- Q. As far as you know, has anyone at Down Dog, including yourself, had any communications of any kind with anyone at Epic Games?
- A. No.

- Q. Have you been given any incentive to testify here today?
 - A. No.
- \blacksquare **Q.** By anyone?
- **A.** No.
- 21 Q. Are you at all concerned about testifying publicly regarding your views as to Apple's policies?
 - A. Yes.
 - **Q.** And why are you concerned?
 - A. In the past, Apple has openly told developers that they

- shouldn't go public with their complaints. I believe there was -- in the app review guidelines it stated if you run to the press and trash us, it never helps.
- Q. That was in the guidelines?

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- A. That was in the guidelines.
- Q. Do you believe that you have ever experienced retaliation from Apple?
- A. I'm not sure. Our most recent update was submitted roughly one week after Epic listed me as a witness. And that update was delayed for 33 days without any explanation from Apple as to the reason for the delay. We asked explicitly.

 We messaged them twice asking for the reason for the delay.

In the past we have never had an app be in review for more than a few days, so 33 days was definitely exceptional. We never got a response from Apple; though it finally was approved -- again, without any explanation -- last Thursday.

- Q. It was approved last Thursday?
- A. Correct.
- Q. When you were deposed in this matter had it been approved?
- 20 A. It had not.
- Q. Did you testify about the facts that you just told this
 Court during your deposition?
 - A. Yes, I did.
- 24 \parallel **Q.** And then the app was approved last Thursday?
- 25 **A.** Yes.

1 MR. EARNHARDT: Pass the witness, Your Honor. 2 THE COURT: Looks like now is a good time to take our 3 second recess of the day. What I am going to ask, Mr. Simon, you are prohibited from 4 5 talking to the lawyers on either side, from talking to the 6 parties on either side, from talking frankly to anybody about 7 anything to do with this case. 8 Do you understand? 9 THE WITNESS: I do. 10 THE COURT: All right. With that admonishment to the 11 witness, we will stand in recess until 1:15. 12 (Recess taken at 12:33 p.m.; resumed at 1:15 p.m.) 13 THE CLERK: Remain seated. Court is back in session. 14 **THE COURT:** You have a witness? 15 MS. FORREST: Your Honor, I have one housekeeping 16 matter, if I might? 17 THE COURT: We are back on the record. The record 18 will reflect that the parties are present. 19 Ms. Forrest. MS. FORREST: Yes, Your Honor. 20 21 On the open matter of the documents related to the 22 third-party information, the parties have conferred and 23 reached agreement that for DX3774, the entire document is 24 received into evidence but the version that will go up on to 25 the box will have one word redacted at Bates numbered page

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              THE COURT: Hold on.
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         I'll tell you what: Just put it on the record and make
     sure I get a copy of it so that I know what's been sealed.
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              MS. FORREST: Yes. Thank you, Your Honor.
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         It's one word on Bates numbered page Epic 04058769. And
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     we'll hand Your Honor an appropriate copy.
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         The second is on DX3818. The parties have conferred on
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     some numerical redactions on various pages, and I will hand a
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     copy to Your Honor of that as well.
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              THE COURT: Okay. That is agreed-upon redactions?
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              MR. DOREN: It is, Your Honor.
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              THE COURT: All right. Based upon that stipulation,
     the stipulation is accepted.
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              MS. FORREST: Thank you, Your Honor.
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              THE COURT: Okay.
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         You abided by my order, sir?
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              THE WITNESS: I did.
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              THE COURT: All right.
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         You may proceed with cross-examination.
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              MS. DEARBORN:
                             Thank you, Your Honor.
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                           CROSS-EXAMINATION
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     BY MS. DEARBORN:
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        Good afternoon Mr. Simon.
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     Α.
         Good afternoon.
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My name is Meredith Dearborn, and I will be asking you a 1 Q. 2 few questions here today. 3 Down Dog's competitors are in the yoga or health or wellness face, right? 4 5 Α. Yes. 6 For example, Down Dog's yoga app competes with other yoga 7 apps like yoga glow, yoga studio, and pocket yoga, right? 8 Α. Correct. 9 Yoga Buddhi's apps -- excuse me. Down Dog's apps do not 10 compete with gaming apps, right? 11 Α. No. 12 Down Dog's apps don't compete with Fortnite, right? 13 Α. No. 14 **THE COURT:** By "no" you mean that's correct? 15 THE WITNESS: Sorry. Yes, that's correct. 16 MS. DEARBORN: Thank you, Your Honor. 17 BY MS. DEARBORN: Now you testified that users can subscribe to Down Dog's 18 19 subscription service from the website, right? Yes, that's correct. 20 Α. 21 And that Down Dog has an iOS suite of apps as well as an 22 Android suite of apps, right? 23 That's correct. Α. 24 Once a user pays for a subscription, they can access your 25 products, the workouts and the yoga practices anywhere, right?

- SIMON CROSS / DEARBORN That's correct. 1 Α. 2 So if a user purchased a subscription to your products on 3 a website, they could then access those workouts on any app; 4 on your iOS apps, on your Android apps, right? 5 That's correct. Α. 6 When users subscribe to Down Dog's subscription service, 7 on the Down Dog website, Apple earns no commission on that 8 purchase, correct? 9 They do not receive a direct commission on the payment, 10 no. 11 Right. Apple only earns a commission when new users sign 12 up for a subscription in Down Dog's iOS apps, right? 13 Yes. They only receive a commission on the payment Α. 14 itself. 15 Right. Q. 16 And that commission is 30 percent in the first year, 17 because it's a subscription service, right? 18 Correct. Α. 19 And then that decreases to 15 percent in the second -- and 20 second year and all subsequent years thereafter, right? 21 Correct. Α. 22
 - Q. About half of Down Dog's iOS users purchase a subscription on the website not on the iOS app. I believe you testified to that on Direct Examination, right?
 - A. That's correct.

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1 Q. Thank you. 2 And iOS users can also access all of Down Dog's content 3 on a web browser on their iPhone or iPad like Safari, right? 4 The app is not fully functional in a mobile browser, but 5 they can access it in a web browser on a desktop. 6 The same app content is available on Down Dog's website, 7 though, right? 8 Correct. Α. 9 And you testified, I believe, when -- on Direct 10 Examination, that you have a fully functional web app on 11 iOS, right? 12 A. No, not on iOS. We have a fully functional web app for 13 Mac, PC, Chromebooks, desktop computers. 14 Q. Thank you. 15 So you are aware, are you not, that there is a class 16 action proceeding on behalf of a class of developers related 17 to this case, right? I don't know the specifics, but yes. 18 19 Q. Have you spoken with counsel in that class action? 20 Α. No. 21 Are you aware of whether your counsel has spoken for --22 counsel for the developer class? 23 I believe that would be privileged, but no I'm not aware. Α. 24 Q. You are not aware?

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Α.

I am not aware.

- Q. To your knowledge, did anyone from Epic suggest to you or to your counsel that you talked to the counsel for the developer class?
 - A. No.

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- Q. Now, Down Dog earns more money from its iOS users than it does from its Android users, right?
- A. Yes.
- Q. I believe you testified on Direct that about half of Down Dog's total revenue comes from iOS users. Do I have that right?
- A. Yes, that's correct.
- Q. And so the other half of your revenue comes from non-iOS users, right?
 - A. It's actually about 50 percent iOS, 35 percent Android, and then the rest is web or a mixture of platforms.
 - Q. Okay. Just focusing on your revenues, half of your revenues that do not come from iOS users, roughly 90 percent of that half come from users who subscribe on a website, right?
 - A. Correct.
 - Q. Just 10 percent of that half comes from users who subscribe through Android in-app purchases, right?
 - A. Correct.
- Q. So 10 percent of 50 percent, that's 5 percent of your total revenues come from Android in-app purchases?

SIMON - CROSS / DEARBORN 1 Α. That is roughly correct, yes. 2 While a quarter to a third of Down Dog's total revenue 3 comes from in-app purchases on iOS devices, right? 4 Α. Yes, it does. 5 Q. Okay. 6 And in 2018, Down Dog earned between about half a million 7 and \$1 million from users who use only the iOS app, right? 8 Α. That sounds right. 9 Okay. And that number increased in 2019, right? Q. 10 Α. Yes. 11 Q. It grew to somewhere between 2 and 3 million? 12 Α. That sounds correct. 13 And in 2020, Down Dog earned \$10 million from users who 14 practiced only on the iOS app, right? 15 That's roughly correct, yes. Α. 16 Now you talked in your direct testimony a little bit about 17 refunds. 18 Do you recall that testimony? 19 Α. Yes, I do. 20 So you also discussed how Down Dog charges a higher price 21 in its iOS app than it does on its website, right?

the iOS app for 9.99 and a monthly subscription on the

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Α.

That's correct.

website for 7.99.

So, for example, you offer a monthly subscription through

- 1 Α. Correct. 2 Q. Thank you. 3 And Apple has no restrictions on promotions that you offer to your users outside of the App Store, correct? 4 5 Except for the fact that we cannot publicize those from Α. 6 within the app, correct. 7 But Apple doesn't tell you what sales price -- what sale 8 price you can charge on your website, for example? 9 Α. Correct. 10 And you, the developer, decide how to set your prices, 11 right? 12 Yes, we do. Α. 13 Apple doesn't tell you what price to set on your website 14 whether sale or not? 15 Correct. Α. 16 Q. So we also talked about how Apple's commission decreases 17 from 30 percent to 15 percent in years two and subsequent, right? 18 19 A. Correct. 20 Do you make any changes to the prices that you charged to 21 consumers in those subsequent years based on Apple's price 22 decreases? 23 A. No. Once a user subscribes, we never changed the price on
 - Q. Okay.

them.

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And you are aware, are you not, that customers sometimes find the price difference between the price you offer on your website and the price you offer in the iOS app somewhat confusing? Yes. Α. And sometimes your customers ask for refunds because of those different prices on your app and on the website? Α. Yes. And, in fact, you have a Frequently Asked Questions document on your website where you talk about this, right? Α. Correct. MS. DEARBORN: Can I get the binder of documents, Ms. Dunn? May I approach, Your Honor? THE COURT: You may. MS. DUNN: Your Honor, would you like a binder? THE COURT: Sure. BY MS. DEARBORN: Sir, if you can turn, Mr. Simon, to PX2624 in your binder. Α. Okay. This is an accurate copy of the Frequently Asked Questions from your website, right? Yes, it is. Α. And I direct your attention to page 5 of 7. This Frequently Asked Question states, why are the in-app

1 prices different from web prices? Are the memberships 2 different? 3 Did I read that correctly? 4 Α. Correct. 5 Now, Down Dog --Q. 6 MS. DEARBORN: You can take that down, Mr. Spalding. 7 Thank you. 8 BY MS. DEARBORN: 9 Now, Down Dog used Apple software development kit to make 10 its iOS app. You talked about this on Direct Examination, 11 right? 12 Yes. It's not possible to make an app that will open on 13 iOS without using the SDK. 14 Okay. You have no reason to doubt that that software 15 development kit contains Apple's intellectual property, right? 16 A. Correct. 17 It contained Apple's APIs, for example? Q. 18 Α. Correct. 19 And you and your company used other tools from Apple as 20 well to build iOS apps, right? 21 In our case it's quite minimal especially with some 22 changes we made in the past year and a half, but yes. 23 Okay. For example, you have used Xcode, right? Q. 24 We have, however only half a percent of our code remains 25 in Swift, and so we do almost no development in Xcode anymore.

1 Q. Okay. But for the development you do do in Xcode, Xcode 2 is a piece of software that developers use to actually write 3 the code, right? 4 Α. Correct. 5 You don't believe that you can create an application that 6 will work on an Apple device without using Xcode. 7 Correct. Although I think that's primarily because of 8 restrictions by Apple, not technical restrictions. 9 Q. Okay. 10 And you use the Xcode tool to build the application when 11 you're developing and also uploading that application to the 12 App Store, right? 13 A. Correct. 14 Another tool that you use is Test Flight? 15 Α. Yes. 16 Test Flight is the easiest way for you to install the 17 latest version of all your company's -- on all of your company's internal devices? 18 19 I think that's somewhat misleading. 20 If it wasn't for Apple's prohibition on downloading --21 installing from outside the App Store, there would be no need 22 for Test Flight. It would certainly be easier for us to 23 distribute through our own website --24 THE COURT: You're going to have to slow down,

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Mr. Simon.

1 THE WITNESS: Sorry. Sorry. 2 BY MS. DEARBORN: 3 And I would also ask you to please focus on my question. 4 Α. Okay. 5 So Test Flight lets Yoga Buddhi's employees, who have an 6 iPhone, automatically install that version and test it before 7 you submit it to Apple, right? 8 A. That's correct. 9 You would not consider using these stools without a 10 license from Apple, right? 11 Α. Sure. Yes. 12 Q. Okay. 13 I want to talk about a number of issues that you raised on 14 your Direct -- in your Direct Examination. 15 You testified that your app -- one of your apps was 16 rejected in June or July of 2020 for offering a free trial 17 without auto renewals afterward, right? 18 Correct. Α. And to be clear, after discussion with Apple, that issue 19 20 was resolved, right? 21 Correct. Α. 22 And you also talked about your app's integration with 23 Apple Health, right? 24 Α. Correct.

And, again, after discussion with Apple, that issue was

resolved, right? 1 2 It was brought up again, and then we had to go 3 through the same process before it was resolved again. 4 So it was -- currently that issue was resolved after 5 discussion with Apple. Fair? 6 Α. Yes. 7 You also talked about -- you referenced a reference that 8 your applications made to the COVID-19 pandemic. 9 Do you remember that testimony? 10 Α. I do. 11 Okay. You indicated that your app was rejected for 12 alluding to COVID-19 when Apple's (sic) later put out its own 13 COVID-19-related app. 14 Do I have that more or less right? 15 That is correct. Α. 16 Q. Are you aware that on March 14th, 2020, Apple announced a 17 policy that only developers from recognized entities such as government organizations, health-focused NGOs, companies 18 19 deeply credentialed in health issues, and medical or 20 educational institutions could address COVID-19 in an app? 21 I was not. Α. 22 Were you aware that Apple's COVID-19 app was launched in 23 partnership with the White House Coronavirus task force in the 24 United States Department of Health and Human Services and the

Center for Disease Control and Prevention?

1 Α. I was not. 2 Q. Okay. 3 So in 2021, you added a link in your iOS app directing 4 users to purchase a subscription on the Down Dog website, 5 right? 6 Α. For three days, yes. 7 You've actually added that link several times before? 8 A. That's correct. 9 And you knew that adding that link violated Apple's App 10 Store quidelines? 11 Α. We did. 12 Q. And at some point in January or February of this year, 13 Apple caught that you were doing this? 14 Two weeks after we had already removed the link, we 15 received a notification from Apple. 16 Q. In response to that communication from Apple, you told 17 Apple that you had intended the link to your website only to appear on the Android version of your app, right? 18 19 Α. That is what we said. 20 And when you said that to Apple, you were not telling the 21 truth? 22 That's correct. Α. 23 Okay. Q. 24 And you recall that Apple told you that developers who try

to evade the app review guidelines might experience delays in

submission of further updates? 1 2 A. I don't remember seeing that message. 3 Okay. Thank you. Q. And today, sir, to be clear, your apps are still on the 4 5 App Store, right? 6 They are, correct. The message that we received in 7 January told us that they had been removed, but they had not, 8 in fact, been removed. 9 So today is not the first day you said critical things 10 about Apple's policies, right? 11 Α. That's correct. 12 In fact, today, your app includes a message about Apple's 13 30 percent commission, right? 14 Actually I believe we removed that in our update that was 15 approved on Thursday. 16 Q. Okay. 17 But at least for a time, for a few months this year, Down Dog's app on the apps on the -- on iOS included an alert to 18 19 your customers regarding Apple's 30 percent commission, 20 correct? 21 Correct. Α. 22 Mr. -- if you would turn in your binder, please, to 23 DX5505. 24 Mr. Simon, is this a screenshot of the notice that 25 appeared in your app?

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Yes, it is.
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     Α.
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         And, again, your apps, all five of them, remain on the App
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     Store today, correct, sir?
        That's correct.
 4
     Α.
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              MS. DEARBORN: Thank you. Pass the witness.
6
              THE COURT: This is which exhibit?
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              MS. DEARBORN: Oh. I'm reminded to move in my
8
     evidence, Your Honor.
9
         We would move in Exhibit DX5505, which is the screenshot
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     that we were just looking at.
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              THE COURT: No objection? Is there any objection?
12
              MR. EARNHARDT: No objection.
13
              THE COURT: It's admitted.
14
            (Defendant's Exhibit 5505 received in evidence)
15
              MS. DEARBORN: As well as 2624.1.
16
              THE COURT: Any objection?
17
              MR. EARNHARDT: No objection.
              THE COURT: It's admitted.
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19
            (Defendant's Exhibit 2624 received in evidence)
20
              THE COURT: Okay.
21
         And that's Exhibit 2624 period. There is no point 1.
22
              MS. DEARBORN: I apologize, Your Honor. The point 1
23
     is a reference to the first page, but we would admit the
24
     entire exhibit.
25
              THE COURT: You would ask that I admit the entire --
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MS. DEARBORN: Thank you, Your Honor. That's what I 1 2 intended to say. 3 THE COURT: Okay. Redirect limited to the scope of 4 Cross. 5 MR. EARNHARDT: Sure. Just a few questions, Your 6 Honor. 7 REDIRECT EXAMINATION 8 BY MR. EARNHARDT: 9 Mr. Simon, what functions are not available through the 10 Safari web browser on iOS that are available on the native 11 app on iOS for your products? 12 There are a number. One that comes to mind is the ability 13 to do push notifications isn't available for a web app on 14 iOS. 15 Additionally, there are UI interactions that may or may 16 not be possible, but we have not optimized our mobile web 17 version to actually fit a mobile screen. When you say "UI," what do you mean? 18 19 User interface. So the actual, what is presented and 20 interacted with on the screen. 21 Can you explain what some of those functionality 22 differences might be from the user's perspective? 23 Yes. Generally HTML doesn't have as much support for 24 touch like finger-based, touched-based interactions because it 25 was designed for point and click mouse interactions.

So, for example, on the first page of our app, there's a user interface that's a circle sort of meant to emulate a clock where the user drags their finger to pick the time of their practice, which is — we have not implemented on the web. Similar like drag, drag and drop functionality of a drawer for their settings in the first page.

- Q. Do you believe that the iOS experience through the Safari web browser is as positive for a user as it is on the native iOS app?
- A. No.

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- Q. Does Apple give you the ability to charge a lower subscription price to folks who have been subscribed for more than a year than to new subscribers?
- 14 A. I'm not sure.
 - Q. If they did give you that option, would you look into it?
 - A. I'm not sure. Generally we just keep the price as the original payment price.
 - Q. Ms. Dearborn asked you some questions about a license that you have with Apple. Do you know the terms of that license?
- 20 **A.** I read through them, but I'm not particularly familiar with them.
 - Q. Did you have any ability to negotiate those terms?
 - A. No, we did not.
- Q. Do you typically enter into license agreements that you have no ability to negotiate?

1	A. I can't think of a license agreement that we didn't
2	negotiate. But generally, we don't do many license
3	agreements.
4	THE COURT: That you did not?
5	THE WITNESS: Sorry. Like, yeah, I can't think of a
6	case where we negotiated any license agreement. But there
7	just aren't that many license agreements we've made.
8	THE COURT: Do you find that objectionable that Apple
9	has millions of developers that it deals with and it has one
10	set of terms?
11	Do you negotiate the various terms of your agreement with
12	your customer?
13	THE WITNESS: No.
14	THE COURT: So do you find that objectionable?
15	THE WITNESS: Not necessarily.
16	THE COURT: Well, yes or no.
17	THE WITNESS: No.
18	THE COURT: Mr. Earnhardt.
19	BY MR. EARNHARDT:
20	Q. Ms. Dearborn asked you some questions about how the
21	conversations with Apple have been resolved and your apps are
22	still available.
23	Did those issues cause disruptions to your business?
24	A. Yes.
2.5	O. What types of disruptions?

A. Mostly delays, feature improvements, and bug fixes. Most recently this update that got delayed added back accessibility features required for blind users.

We have one particularly emphatic blind user who actually went public with her complaint that we had not resolved the issues yet.

Q. There was testimony that you have, in fact, put a link in your iOS app telling users about the web-based pricing despite the policies.

Why did you do that?

A. As I think I mentioned earlier, when we have done sales, some users no matter how clear we try to make it in the email that the sale is only offered through our website will go to the app looking for that and then mistakenly purchase at the full price. That wouldn't be such an issue except that we can't issue refunds in those cases.

So we felt like the benefits outweighed the cost in the case of immediately after we announce a sale, including the link to reduce that customer confusion. Looking back on it, I think we probably should have instead just removed the ability to pay with Apple for those three days. That wouldn't have violated their policies. It probably still would have led to customer confusion, but no mistake in payments.

MR. EARNHARDT: No further questions.

THE COURT: Recross limited to the scope of Redirect?

MS. DEARBORN: No further questions, Your Honor. 1 2 THE COURT: Okay. 3 **EXAMINATION** THE COURT: So I didn't have my pen out fast enough 4 5 to write the numbers down. I was hoping you could go through 6 them with me very quickly. 7 Hundred percent of your revenues you said 50 percent of 8 those come from iOS users? 9 THE WITNESS: Correct. 10 THE COURT: And of that 50 percent, what is the 11 purchase on the devices versus the web? 12 THE WITNESS: Roughly 50/50. 13 THE COURT: Okay. And then with Android, you said 30 percent of your revenues come from Android users? 14 15 THE WITNESS: Yeah. 16 THE COURT: And what is the Android purchase versus 17 web purchase? 18 THE WITNESS: It's about 90 percent purchase on our 19 website. 20 THE COURT: 90, okay. 21 And then when you said "mixture," what else --22 THE WITNESS: Sorry. Some users will actually do 23 practices on multiple platforms. So that 50 percent number, I 24 believe, was actually users who only practice on iOS. And 25 then it's about 30 percent only practice on Android, 5 percent

only practice on web, and then the rest practiced on multiple 1 2 platforms. 3 THE COURT: Okay. But once they have your app, regardless of where they get it from, on the Apple device they 4 5 can use it? 6 THE WITNESS: Yes. They are perfectly able to use it 7 on any platform. 8 THE COURT: And so in terms of the use on Safari 9 versus the use of the app, if they already have the 10 subscription, why would they go to Safari as opposed to just 11 the app? 12 **THE WITNESS:** I'm not aware of users trying to -- any 13 substantial number of users trying to use our app on mobile 14 Safari. 15 THE COURT: Okay. So that doesn't sound like that 16 would ever happen. 17 THE WITNESS: We actually pop up an alert, if they visit our website on a mobile browser, telling them that for 18 19 the best experience, they should download the data app. 20 THE COURT: Okay. Obviously then they can't purchase 21 the subscription through Safari. 22 THE WITNESS: They can purchase a subscription 23 through Safari. 24 THE COURT: Oh, they can. 25 THE WITNESS: Yes. We are just not allowed to link

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     to that option from within the app.
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              THE COURT: It's not as easy as the app, but it's
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     doable?
              THE WITNESS: Yeah. I think it's pretty easy.
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              THE COURT: You think it's easy?
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              THE WITNESS: (Nods head.)
7
              THE COURT: Do you know of any distinctions between
8
     the experience between purchasing on Safari versus the app?
9
              THE WITNESS:
                            They have to either log into their
10
     PayPal account or enter their credit card information. But I
11
     think most browsers now have saved your credit card
12
     information so that's become pretty easy.
13
         When doing an in-app purchase, Apple often prompts you to
     re-enter your Apple I.D. anyway, so it's not clear that it's
14
15
     actually a smoother process.
16
              THE COURT: Okay. How long did you have the message
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     up with respect to the link -- not the link, but the
     notification of the 30 percent commission?
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              THE WITNESS: The screenshot that we just saw?
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         That was live in the app from when we -- I believe we
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     updated the app in December of last year. And then the next
22
     update removed it, which didn't get approved until last
23
     Thursday. So it was there for, what was that, four months.
24
              THE COURT: Over the course of those four months, did
25
     you see your traffic patterns change?
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THE WITNESS: Not that I recall. 1 2 THE COURT: So even though they had that link, you 3 still, for iOS users, were 50/50? THE WITNESS: Sorry. So the alert that we saw in 4 5 Exhibit 4 didn't actually have a link to purchase on the 6 website, it just said that Apple takes 30 percent. They still 7 couldn't find the website purchase option. The link that we 8 included was only there for three days, and I don't think any 9 exhibit has been shown with that link. 10 THE COURT: And for those three days, did you see a 11 change in your customers purchasing? 12 THE WITNESS: It is hard to say because that was the 13 three days after we announced the sale, which was our cheapest 14 price ever. So we have a huge influx of purchases, but it's 15 unclear how much the link was responsible for that. 16 My guess is it was not substantially responsible for that. 17 THE COURT: Okay. But with respect to the longer period of time, that four months with the 30-percent 18 19 commission so that people actually knew what was happening, 20 you didn't see any real change in --21 THE WITNESS: No, not that we noticed. 22 THE COURT: Okay. Great. Thank you. 23 THE WITNESS: Thank you. 24 THE COURT: Any questions with respect to mine? 25 Mr. Earnhardt?

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MR. EARNHARDT: None here, Your Honor.
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              THE COURT: Ms. Dearborn?
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              MS. DEARBORN: None.
              THE COURT: Okay, sir. You are excused. You may
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 5
     step down.
 6
              THE WITNESS: Thank you.
7
              THE COURT: You can now talk to anybody when you
8
     want, just not during your testimony.
9
         Next witness.
              MR. EARNHARDT: Thank you, Your Honor. Epic calls
10
11
     Aashish Patel.
12
         (AASHISH PATEL, called as a witness for the Plaintiff,
13
     having been duly sworn, testified as follows:)
14
              THE WITNESS: I do.
15
              THE CLERK: Please be seated. Pull the mic up and
16
     please state your full name and spell your last name.
17
              THE WITNESS: Sure. My name is Aashish V. Patel.
     Last name Patel, P-A-T-E-L.
18
19
              THE COURT: How do you spell your first name, sir?
20
              THE WITNESS: It's A-A-S-H-I-S-H.
21
              THE COURT: Okay. Is the court reporter able to hear
22
     him clearly?
23
         We are going to try that again. I need you to speak up
24
     just a little bit.
25
              THE WITNESS: Okay. My name is spelled
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PATEL - DIRECT/ EARNHARDT

1	A-A-S-H-I-S-H.
2	THE COURT: Thank you. Good afternoon.
3	THE WITNESS: Good afternoon.
4	THE COURT: You may proceed.
5	DIRECT EXAMINATION
6	BY MR. EARNHARDT:
7	Q. Good afternoon, Mr. Patel.
8	A. Good afternoon.
9	Q. Where are you currently employed?
10	A. I'm employed at Nvidia Corporation.
11	Q. At a very high level, what does Nvidia do?
12	A. Nvidia develops platforms for graphics for gaming as well
13	as artificial intelligence, automotive, and a few other areas.
14	Q. What is your current position at Nvidia?
15	A. I'm the director of product management for the GeForce Now
16	product.
17	Q. And what are your responsibilities in that role?
18	A. I define product specifications around GeForce Now and
19	help them drive them through the company. I do business
20	development looking for partners for GeForce Now. I work on
21	analytics, primarily business analytics, and I help on
22	procurement of data center and other infrastructure for
23	GeForce Now.
24	Q. You mentioned GeForce Now a few times.
25	What is GeForce Now?

A. GeForce Now is our cloud gaming product.

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- Q. And at a basic level, what does GeForce Now do?
- A. GeForce Now has servers in the data center. These are similar to what you would have as PCs at home, but in the server class. And this is where the games are run, and then we stream a video stream to the user so that he can see and enjoy the game.
 - Q. And the user is using some other device in order to access the PCs that are running in the data center; is that right?
- A. Yes. We call them clients. So they have different clients, PC, Mac, TV. Those would be clients.
- Q. When did GeForce Now first become available to users?
- A. Nvidia has been investing in GeForce Now since 2014, but our commercial service started in February 2020. So last year.
- Q. Now before streaming services were developed, what were users' options for playing video games?
 - A. Before streaming solutions, you would buy the game and run it on your PC at home for PC games. So you'd have to buy a PC, buy the software, install it, and play.
- Q. And do users still do that?
- A. Yes, they do.
- Q. Which has more users today, game streaming or PC-based native game play?
 - A. At Nvidia, it's PC-based native game play.

Q. Just to make sure everyone understands, can you explain to me from a technological standpoint, meaning really the location of the hardware and software, how cloud gaming, cloud streaming differs from playing a game locally on a device?
A. Sure. I will start with locally.
So locally you would have a PC like this laptop in front of me. You would buy the game and install the game on here, and you would use a keyboard and mouse. And every button you

and you would use a keyboard and mouse. And every button you press would go to the CPU and GPU, the processing power within this laptop. So that's what happens for local game play.

In cloud gaming, the hardware lives in the data center.

So every time a user presses a button, we send the button to the data center, feed it to the game running on the server there. The game generates what we call a video frame. We take that video frame, and through engineering, compress it, send it to the user and show it to the user.

- Q. So what is being sent from the cloud to the user's device is a video feed; is that correct?
- A. Yes. It's -- yes. In summary, it is a video feed.
- Q. So with cloud gaming, does any game software, not -- I'm not talking about the streaming client software, any game software make its way onto the user's device?
- A. No.

- Q. Again, where is that software?
- A. It runs in the servers in the data center.

1 Let's talk about the games that users can play on GeForce Q. 2 Now. 3 Can users stream any game in existence through GeForce 4 Now? 5 Nvidia works with game publishers and bring their --6 receive permission from the publishers to bring those games 7 onto our platform. 8 Today we have about 800 games, which is a small subset of 9 all the games in existence. 10 THE COURT: Small subset of? THE WITNESS: That's -- the last number I read, I 11 12 don't know if it is true, Steam, which is a company that has a 13 lot of games, had approximately 30,000 games on their service. THE COURT: Okay. 14 15 BY MR. EARNHARDT: 16 GeForce Now offers, you said, 800 games in its catalog? 17 I think it's 850. We add new games every week so it's hard to be very specific. So it's between 850 and 900 I would 18 19 say today. 20 Does even Steam offer every video game that there is? 21 Steam is also a platform for publishers, other game 22 stores have other games. 23 It's fair to say that the vast majority of video games are Q. 24 not available through GeForce Now for streaming, correct? 25 Α. I would say that, yes.

- Q. So when a user subscribes to GeForce Now, at that point can they automatically play all of the games available in the GeForce Now catalog?
- A. We make those games available to users, but the users have to own them. They must have had to purchase their games through either Steam, or Epic Games Store or Microsoft, and the games that they have purchased are available for them to play.

If they have not purchased them, then they will be prompted with the screen saying you don't own this game essentially.

- Q. Can a user then purchase the rights to play the game through GeForce Now itself?
- A. Not today. No, you cannot.

- Q. So if a user wanted to play more games in the GeForce Now catalog through streaming, what would the user need to do?
 - A. Well, the user would first have to determine what games are on the service. And we have the web page for that. Go to their game store and see if it is available there, and purchase it on that game store. And then come back and play on the GeForce Now service.
 - Q. So does GeForce Now enable users to play video games and bypass transacting with some App Store or game store?
- A. No. The user has to log into the App Store or the game store, and only if that App Store or game store verifies that

- 1 the user owns the game can the user play the game.
- 2 Q. Clarify one point. Other than the GeForce Now client
- 3 itself, did GeForce Now enable a user to download any kind of
- 4 software, gaming or otherwise, any kind of software onto his
- 5 or her device?
- 6 **A.** No.
- 8 center are PCs; is that right?
- 9 A. They are like PCs. They have the same elements of the PC.
- 10 Q. Are they compatible with Xbox games?
- 11 A. No, they are not.
- 12 **Q.** Are they compatible with PlayStation games?
- 13 A. No, they are not.
- 14 **Q.** Are they compatible with Nintendo games?
- 15 \blacksquare A. No, they are not.
- 16 Q. So for what platform games can users play through GeForce
- 17 Now?
- 18 A. Windows PC games is the current model.
- 19 Q. So just to be clear, can a user stream a game coded for
- 20 the Xbox through GeForce Now?
- 21 **A.** No, they cannot.
- 22 \parallel **Q.** And would the answer be the same for PlayStation?
- 23 **A.** Yes.
- 24 \parallel **Q.** How about this: Can a user stream a game coded for iOS
- 25 through GeForce Now?

A. No, they cannot.

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- Q. When did GeForce Now become a paid service?
- A. I believe it's February 4th, 2020.
- Q. At a high level, what benefits do users receive from a cloud gaming or streaming service?
- A. At a high level, you get access to a pretty powerful gaming PC in the cloud and you can stream to any client. So to your Mac PC as I mentioned before.
- Q. How can users access the GeForce Now product?
- A. Well, first, they would have to come to our website,

 download the client, sign up for the service, and then through

 the client access play games.
- 13 Q. Do you offer native applications of GeForce Now?
- 14 **A.** Yes, we do.
- Q. And do you also offer a web-based experience of GeForce Now?
- 17 **A.** We do.
- Q. Which provides the better experience, the native application or the web-based application?
- A. The native application affords us a lot more control on video and quality. The browser application has more restrictions.
 - Q. Is GeForce Now's native application available on iOS?
 - A. No.

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Q. Very briefly, why not?

1 A. We had written and invested in a native application. We 2 submitted to Apple for review. Apple approved it, and then a 3 few weeks or a few days, I don't know exactly what, rescinded 4 their approval. And we had discussions with Apple about 5 getting it approved, but we couldn't find a solution together 6 so we decided to invest in the browser based. 7 Q. On which platforms is GeForce Now available to users as a 8 native app? 9 On your Windows PC, on an Apple Mac desktop or laptop, on 10 Android TV set top boxes --THE COURT: Android TV? 11 12 THE WITNESS: Yes. Their TVs. It's the set top box 13 that connects to the TV. 14 THE COURT REPORTER: I'm sorry --15 MR. EARNHARDT: Set top box. 16 THE WITNESS: It's an industry term, set top box. 17 It's a box that you place on top of your TV. And android phones as well. 18 BY MR. EARNHARDT: 19 20 Q. Are there any platforms besides iOS where GeForce Now is 21 offered but not available as a native app? 22 It's on iPhones and iPads for iOS as well as for 23 Chromebooks. There's a browser application for Chromebooks. 24 THE COURT: Wait. So it's not available on those?

BY MR. EARNHARDT: 1 2 As a native application --3 THE WITNESS: As a native. Only the browser is available on there. 4 5 THE COURT: So it's not -- you don't have a native app for iPhones, iPads, or --6 7 THE WITNESS: Chromebooks. THE COURT: -- Chromebooks. 8 THE WITNESS: That's correct. 9 BY MR. EARNHARDT: 10 11 You mentioned this, but just to be clear, is GeForce Now 12 available on iOS to users through some other mechanism than 13 a native app? Yes, through a browser client. 14 15 And did Nvidia try to bring GeForce Now to iOS through a 16 native app? 17 Yes, we did. Α. Would that have been GeForce's Now preference? 18 19 Α. Yes, it was. 20 Is that still your preference? 21 Α. Yes. 22 Would you agree or disagree that having GeForce Now on 23 iOS as a web app is the same thing, as a practical matter, as 24 having GeForce Now on iOS as a native app? 25 Α. No, there are differences.

- 1 Q. Which is a better experience for the user? 2 Α. The native app would be a better experience for the user. 3 Let's talk about some of the differences. 4 If an iOS user searches for game streaming in the App 5 Store today, will she find GeForce Now? I haven't done a search in a while, but I don't believe 6 7 so. 8 What if she actually searched for GeForce Now? 9 Α. It would not be the GeForce Now application. That's true even though GeForce Now is available through 10 Safari on iOS, correct? 11 12 Α. That is correct. 13 How would that be different if GeForce Now was offered as 14 an app in the App Store, a native app? 15 Like other applications, it would show up in the search 16 and the user would have the option of purchasing and 17 installing it. Q. Now, once a user has found out about the availability of 18 19 GeForce Now through Safari, what is the process for setting it 20 up to use on an iOS device? 21 So once they've discovered they have to go to a website 22 play.geforcenow.com on their iOS device, they will be
 - The first thing we do is we inform the user of how to install a bookmark, an app icon onto the -- onto their home

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prompted with a screen.

screen. So it's a series of three or four instructions that the user has to follow so that an application icon is installed on their phone. Then once that's done, then they have the same — they have the option of logging in or using the app.

- Q. Then what happens if you try to use the service for the first time through Safari?
- A. For the first time, you have to be logged in. So some games will be shown, I believe, and if they try and click on the game, within the application they will be potentially shown a list of games. And if they click on a game, and if they are not logged in, they will be asked to log in.

If they don't have an account, they will be asked to create an account. Once they've created an account and logged in, they will check if they are entitled to the service, if they're signed up for the service, and if they're signed up for the service, then the game would start streaming.

- Q. The process of creating a shortcut on the home screen of the device, can you describe what that process is like for a user?
- A. From what I recall, the user has we show a screen with four steps. The first step is to click on the win (phonetic) Safari browser, an icon that will bring up a list of options. One of them is to add to home screen. Maybe it's not exactly what I'm stating it is, but that's the intent.

And then you type in what you want the name for this shortcut to be, and then you press enter, and that's what we inform the user to do.

- Q. How does the process you just described for setting up

 GeForce Now as a web app compare to the process of downloading

 GeForce Now as a native app if it were offered on iOS?
- A. The browser app is four or five steps, which is typically not something an average user would do. So it's a bit more complicated. On an App Store experience, you would find the app, click on install it, and it would install it, put the icon on, so it's one click and done.
- Q. Do you understand the term "user interface?"
- **A.** Yes.

- Q. What does that term mean?
 - A. It's the interface that the software provides and how the user interacts with it.
 - Q. Are there differences between web apps and native apps in terms of what Nvidia can do with the user interface with GeForce Now?
- **A.** Yes, there are.
- O. What are the differences?
 - A. The web app is within the browser. And there are times when you rotate your phone that the browser bar may show up.

 We have hidden it through tricks or information we found. In the native app, you would have full control over that

experience.

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- **Q.** How does the ability to control the user interface in terms of touchscreen controls compare in a native app versus a web-based application?
- A. In a native app using a mouse and other touch interfaces, you have full control of the screen. On a browser app, there are limits to the edges. You might not be able to click on the edges of the screen and register the touch.

Mouse is also different. The browser app doesn't provide a way to use a mouse with an iPad. With the native app, we can actually use a mouse with an iPad and that affords a user to play more games.

- Q. Have you heard the term "latency"?
- A. Yes, I have.
- Q. What does that mean?
- A. At a high level, it's from when you trigger an action to when you see the effect of an action.
 - Q. Do you know what a decoder is?
- A. In the game streaming world, that's taking a video image that's encoded and decoding it and destroying it.
- Q. Does a decoder and the quality of a decoder have an impact on latency?
 - A. Yes, it does.
 - Q. And how -- why is that?
 - **A.** It depends on the technology behind the decoder, the

- decoder that's being written and how the decoder's algorithm works when there's inconsistent or adverse natural effects.
 - Q. To summarize, if the decoder is good, will that reduce latency?
 - A. It can, yes.

- Q. For a native application, what can Nvidia do to reduce latency with the decoder?
- A. In the native application, we have very low-level control. So we can spend engineering resources in creating our own algorithm and looking for packet losses or other natural effects and optimizing the video stream.
- Q. Can Nvidia do that for a web application?
- A. No. The web application, there's some control, but nowhere near the level of control that a native application has.
 - Q. And what is the result on latency?
 - A. The latency can be a bit higher.
- Q. What impact does high latency have on a user playing a game?
 - A. Depending on the user and the game, the user may feel uncomfortable with the latency, doing an action and seeing the action performed later, it could result in if they are in a racing game, turning too late, for example.
- Q. Or if they are in a competition game, could someone with high latency be at a --

1 THE COURT REPORTER: I'm sorry, can you repeat the 2 question? 3 MR. EARNHARDT: Sure. BY MR. EARNHARDT: 4 5 In a survival game, would someone with high latency 6 potentially be at a competitive disadvantage compared to 7 someone with low latency? 8 MR. SRINIVASAN: Objection, foundation. 9 THE COURT: Overruled. 10 THE WITNESS: Depending on the game, yes, there can 11 be competitive disadvantages for a user with higher latency. 12 BY MR. EARNHARDT: 13 Do you know what kind of game Fortnite Battle Royale mode 14 is? 15 Α. Yes. 16 Q. What kind of game is it? 17 In the industry we call it FPS or first person shooter 18 game. 19 Is it a defense and survival game? 20 Yes, it is. Α. 21 If a user is playing Fortnite Battle Royale through a web 22 app, could that user be at a competitive disadvantage to 23 someone playing on a native application due to latency? Sure, they could, depending on the latency. 24 Α. 25

In your experience, how do gamers react if a game is

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published where certain users are inherently at a competitive disadvantage?

- A. In my experience, I've seen complaints from users like that.
- Q. Do you understand the term "frame rate?"
- A. Yes, I do.

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- Q. Do you understand the term inconsistent frame rate?
- A. Yes, I do.
 - Q. Can you explain what that means?
- A. Frame rate is the rate at which you are sending those images. So how, if someone is moving on the screen, that movement may be 60 frames every second. So every second you actually generated 60 frames that the user sees. If it's in constant 60 frames per second, it's a very fluid motion.

If that frame rate is inconsistent, the user can experience what we call jitter or stutter where the movement is interrupted.

- Q. And can inconsistent frame rates sometimes be an issue for game streaming?
- A. Depending on the user's network quality, yes it can be.
- Q. How do web apps and native apps compare in terms of being able to solve for the potential problem of inconsistent frame rates?
 - A. With the native app, like your previous question, you would have more control to write better algorithms for it.

1 Does that result in a better user experience on native Q. 2 apps? 3 Α. It can, yes. 4 What is a peripheral as that term is used in gaming? 5 A peripheral is a device that's attached to your gaming 6 system. So a local PC, for example, the laptop, your mouse 7 could be a peripheral. A controller to control the game would 8 be a peripheral. 9 Are there differences between web apps and native apps in 10 terms of support for peripherals? 11 There can be. For example, on a native app there is a 12 feature for controllers called haptic feedback. If the 13 controller vibrates -- haptic. If the controller vibrates or 14 not. And we can make that feature available for native apps, 15 but not for browser apps. 16 Q. Is another example the ability for an iPad to support a 17 mouse? 18 Α. Yes. 19 Q. And is that available on a native app for GeForce Now? 20 There is no native app that we know, we could make it 21 available for a native --22 THE COURT REPORTER: I'm sorry.

THE WITNESS: There is no native app for iPads but if there was one, we would make it available.

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BY MR. EARNHARDT:

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- Q. Can you make it available through a web app?
- A. No, not today.
- Q. So based on these differences we just discussed, do you believe playing GeForce Now on a web app on iOS, is the same experience as playing GeForce Now on a native app on iOS?
- A. For some users it may differ, yes.

THE COURT: I didn't hear you.

THE WITNESS: For some users it may be different.

BY MR. EARNHARDT:

- Q. Does Nvidia have a preference between web apps and native apps for iOS?
- A. Native apps definitely provide us with more control of the GeForce Now experience.
- Q. Nvidia, in fact, developed a native app for iOS, correct?
- 17 \blacksquare A. Yes, we did.
- 18 Q. What resources went into the development of that application?
- A. A combination of our engineering teams as well as user interface design teams.
 - Q. Did that take time and money?
- 23 **A.** Yes.

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Q. Did Nvidia successfully write an app for GeForce Now that would run on iOS?

- 1 Α. Yes, we did. 2 Q. Did you submit the app to Apple for approval? 3 Α. Yes, we did. 4 Q. Can you tell me what happened? 5 Α. We submitted the app through Apple's approval process. 6 Apple approved the app, and then a few days to a few weeks 7 later they rescinded their approval. 8 Q. On what basis? 9 They provided a pointer to the application guidelines, and 10 they said the app was not conforming to those application 11 quidelines. 12 Which quidelines? 13 I don't remember the exact number, but it was the 14 guidelines related to remote desktop services, or things of 15 that nature. 16 I'm going to show you a document. 17 MR. EARNHARDT: May I approach, Your Honor? THE COURT: You may. 18 19 MR. EARNHARDT: We have another binder for you if you would like it, Your Honor? 20 21 THE COURT: Why don't you hand it over there. I am
- MR. EARNHARDT: Okay.

hoping I have all of them already.

24 BY MR. EARNHARDT:

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Q. If you could turn to the tab labeled PX2790.

- 27 or 7? 1 Α. 2 Q. 2790. 3 Α. I have PX721, 724, 725, 728, and 729. 4 Q. You may have the wrong binder. 5 THE COURT: 2790 is already admitted. 6 MR. EARNHARDT: Yes. 7 THE COURT: Someone should have it there. It's the 8 App Store Review Guidelines. 9 MR. EARNHARDT: Correct. BY MR. EARNHARDT: 10 11 Do you have it now, Mr. Patel? 12 Α. Yes, I do. 13 If you can turn to section 4.9 on page 18 of that 14 document. 15 Yes. Α. 16 Do you see that says streaming games? 17 Yes, I do. Α. 18 And the first sentence says, streaming games are permitted 19 so long as they adhere to all guidelines? 20 Α. Yes. 21 And then if you look at the next paragraph, 4.9.1 it 22 reads, each streaming game must be submitted to the App Store 23 as an individual app so that it has an App Store product page.
 - A. Yes, I see that.

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Q. What would Nvidia have to do to its app to comply with

PATEL - DIRECT/ EARNHARDT

that policy? 1 2 We would have to take our 850 games that we have a license 3 for and create individual App Store applications and submit 4 them for approval. 5 Is it possible for Nvidia to do that? Nvidia doesn't own the rights to those games. 6 Α. 7 And, again, just to be clear, other than the GeForce Now 8 client itself, can GeForce Now be used to distribute any sort 9 of software to a user's device? 10 Α. No. 11 Does that include malware? 12 Α. Yes. Malware is not distributed through the software. 13 From your perspective, is there any security benefit that 14 would be gained from updating your app to comply with the 15 quideline we just reviewed? 16 MR. SRINIVASAN: Objection, foundation. 17 THE COURT: What's your title again, sir? THE WITNESS: I'm a product manager. Director of 18 19 product management. 20 **THE COURT:** Do you have any background or foundation 21 in security protocols or building security issues with respect 22 to apps? 23 THE WITNESS: Not on a technical level.

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THE COURT: Sustained.

PATEL - DIRECT/ EARNHARDT

BY MR. EARNHARDT:

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- Q. Did Apple ever tell you that there was a security basis on which it was rejecting the GeForce Now app?
- A. No, they did not.
- Q. Does GeForce -- withdrawn.

 Does Nvidia consider other cloud game streaming services
 to be potential competitors of GeForce Now?
 - A. There are other providers of cloud gaming services in the market, yes.
- Q. And what services are those?
- A. Google has a service called Google Stadia. Microsoft has a service called xCloud. Amazon has a service called Luna.
 - Q. Any of those services available through a native application on iOS?
 - A. No. The last time I checked was a month ago, I didn't see one then.
 - Q. So, so far, we have been discussing streaming games, whether through a native app or a web browser. I want to switch topics, and I want to talk about the differences between streaming a game versus playing it locally.
- 21 **A.** Okay.
- $22 \parallel \mathbf{Q}$. Do you understand the difference?
- 23 **A.** Yes.
- Q. So you testified about latency. Holding all else equal, how does the latency compare between streaming a game versus

playing it locally?

- A. Streaming a game requires signals to be sent to the server in back so that can have higher latency than the native game.
- Q. That's just because due to physics it takes time from the signal to go to the data center and back to the device?
- A. That's correct.
- Q. Does a user need to be connected to the internet to stream a game on GeForce Now?
- A. Yes.

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- Q. Does a user need to be connected to the internet to play a game offline locally on their device if the game permits offline play?
- **A.** Not in my experience.
- Q. Does GeForce Now have requirements as to how strong a user's internet connection must be to use the GeForce Now service?
- 17 **A.** Yes, we do.
 - Q. What are those requirements?
- A. I believe there are different requirements for different resolution. So for a 720P, so HD resolution, it's 25 megabits -- 15 megabits per second of bandwidth required.
 - Q. Do you recommend that users have 15 megabits per second?
 - A. Not on the website. We may in the app as a recommended setting.
 - Q. Let me show you another document. If you can turn to

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Exhibit PX721.
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     Α.
         Yes.
3
         Do you recognize this document?
 4
        It looks like something you would find on the Nvidia
5
     website.
6
        And does Nvidia keep this website up to date in the
7
     ordinary course of its business?
8
     A. Yes.
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              MR. EARNHARDT: We move to admit 721 -- PX721, Your
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     Honor.
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              THE COURT: Any objection?
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              MR. SRINIVASAN: No objection.
13
              THE CLERK: What is the number again?
14
              THE COURT: 721.
15
         721 is admitted.
16
             (Plaintiff's Exhibit 721 received in evidence)
17
     BY MR. EARNHARDT:
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        If you look in the middle of the front page. It says low
19
     bandwidth.
         Yes, I see it.
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     Α.
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         If you look at the last part of that first sentence, it
22
     says, we require 15mbps and recommend 50mbps, correct?
23
     A. Yes, I see that.
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     Q.
        You can put that aside.
25
         How does the quality of a user's internet connection
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impact the experience of streaming a game through GeForce Now?

A. Depending on the user's bandwidth, you can get a higher quality image. So I referred to 720P versus 1080P. Those are the distinctions in quality in resolution.

Packet loss, that's another metric, number of packets that were lost. And if there's a lot of packet loss, then you would either experience lower image quality or some skipped frames.

- Q. And when you say packet loss, those are packets being lost as data travels over the internet, correct?
- A. That's correct.

- Q. And if an internet user's connection is weak enough, would they be unable to stream through GeForce Now?
 - A. Yeah. We have certain limits. If their packet loss is really high, we cannot decode a frame, then we will inform the user and probably not see a video stream.
 - Q. And, in fact, Nvidia discourages users from accessing GeForce Now through a 4G cellular network, correct?
 - A. We let the user know that they would have a better experience over WiFi -- over a WiFi network. And if they are on 4G, they should be aware of their data usage while using GeForce Now.
 - Q. Some cellular providers cap the data usage for mobile users, correct, over 4G networks?
 - A. Yes. Mine does.

- Q. And some cellular companies reduce the bandwidth available to a user if the user is using a lot of bandwidth, correct?
 - A. I've seen that as on some providers' websites.
 - Q. And how would throttling the bandwidth impact an ability of a user to stream GeForce Now through cellular?
 - A. When bandwidth isn't throttled, they may see a higher image quality. Once bandwidth is throttled, they may see a lower image quality or no image, depending on the level of throttling.
- 10 Q. What type of connection does Nvidia recommend users use for GeForce Now?
- A. We recommend that users use an ethernet connector, which means a hard-wired network or WiFi 5 gigahertz.
 - Q. Can you plug into the ethernet if you are wanting to play a game on the subway on the way to work?
 - A. No, you cannot.
 - \mathbf{Q} . How about if you want to play a game in the park?
- 18 A. No, you cannot.
- Q. Can you log on to your home WiFi 5 gigahertz network on the subway?
- 21 **A.** No.

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- 22 \mathbf{Q} . How about in the park?
- 23 **A.** No.
- 24 \square Q. How about on an airplane?
- 25 **A.** No.

- Q. So I want to talk about capacity on GeForce Now. I understand some of this is confidential. And so I don't want you to tell me any specific numbers. I will ask generally, and then maybe we will come back and get into specifics.
- A. Okay.

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- Q. In general, does Nvidia have limits on GeForce Now capacity?
- A. Yeah, there is GeForce Now capacity, and we continue to add to it, but there is a limited capacity.
- Q. What happens if more users attempt to stream through GeForce Now than the server capacity allows?
- 12 **A.** The user will be informed they have to queue until capacity is available.
- 14 Q. What does that mean, queuing?
 - A. The user will be told that there are 10, 20 people ahead of him, and we will keep that number up to date. So the user has to spend some time until it's their turn to play.
 - Q. And is there also a queuing capacity on GeForce Now?
- 19 A. There is.
- Q. What happens if more users try to stream through GeForce
 Now than either the playing capacity or the queuing capacity
 can support?
 - A. If the number of users queuing is greater than the queuing capacity, the user will be informed to come back later.
 - Q. The service is not available, correct?

- A. They will say the service is currently not available, please try again later.
- Q. Why is it that Nvidia has these capacity limitations?
- A. Nvidia has to invest in building our infrastructure and data centers, and we do that on an ongoing basis, but there are limits while we are expanding.
- Q. The limits are imposed by physics because computers can only process so much information at once, correct?
- A. That's correct.

- Q. If you wanted to expand your capacity, what would you have to do?
 - A. We would have to procure more data center space, more internet space, buy additional servers, buy all the infrastructure that goes around the servers, install them, pay for data center space and rent. Those are some of the elements of expanding capacity.
 - Q. Has Nvidia developed a way to determine which players get priority access given the capacity constraints?
 - A. The Nvidia service has two tiers. One is a free service that is provided to users at no cost with some limitations and then there is a paid service.

We always prioritize paid users in getting capacity before free users.

Q. If enough paid members are accessing the service at the same time, is it possible that they still will have to wait in

- 1 a queue before playing? 2 If there are that many paid users, yes. 3 Has Nvidia placed limits on how long users can play on 4 GeForce Now? 5 For each session, each time you play, we do have limits, 6 yes. 7 What are those session limits? 8 For paying users, it's six hours per session. For free 9 users it's one hour per session. 10 And what percentage of GeForce Now users are free users? 11 Α. Currently the majority of users are free users. 12 Would you say it's the vast majority? Q. 13 A. I would say it's the vast majority. 14 Q. What play session limits do those users face? 15 Α. One hour. 16 What happens to a user if she reaches her play time 17 limitation on GeForce Now? When they are approaching their limitation, the user is 18 19 shown warnings that their session is going to terminate with a 20 countdown giving the user an opportunity to wrap up their 21 gaming session. And once a free user has finished that, they
 - Q. And if they were kicked off and they wanted to restart the game, and they were already full of capacity, what would the user then have to do?

would then have to go and restart the game in order to play.

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- A. Once the user session has been terminated, the user would then have to requeue to get more capacity in order to play.
- Q. Are there limits on how long a gaming session can be when a user is playing locally on their iPhone?
- A. Not in my experience.

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- Q. Are there queues to access the games you want to play when you are playing locally on your iPhone?
- A. Not in my experience.
- Q. We have been talking about some capacity issues. Nvidia has these capacity issues for GeForce Now even when all of the servers are working appropriately, correct?
- 12 **A.** We have capacity limitations and then sometimes, though rare, we can have outages.
 - Q. How do server outages impact capacity?
 - A. The data center zone where the server outage happened, then that capacity is not available for users.
- Q. What sort of server outages has Nvidia in fact experienced for GeForce Now?
 - A. We've had a few rare outages where all the servers have been taken offline.
- Q. Are server malfunctions a risk to someone who wants to play a game locally on their iPhone?
- 23 **A.** Not in my experience.
- Q. Does Nvidia monitor how its users access GeForce Now across platforms?

1 Α. Yes, we do. 2 What information do you collect? 3 For technical reasons, we look at what device the user has 4 and make decisions on how to stream to those devices so we 5 know what device the user is playing on. 6 Q. Can you tell from your data how many GeForce Now users 7 have access GeForce Now on both iOS through Safari and on 8 Android? 9 Α. Yes, we have that data. 10 What percentage of GeForce Now users have done that? 11 I looked at the data for November 2020 and December 2020, 12 and it was below 2 percent. 13 THE COURT: And it was what? THE WITNESS: Below 2 percent. 14 15 **THE COURT:** For both? 16 THE WITNESS: Users that used both an Android device 17 and an iPhone device. 18 MR. EARNHARDT: Your Honor, I have about two minutes 19 of questions that relate to highly confidential information 20 for which I understand Nvidia would like us to close the 21 Court. So I would ask permission to do that. 22 THE COURT: No. We will hear cross first. 23 Cross. 24 MR. EARNHARDT: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. SRINIVASAN:

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- Q. Good afternoon, Mr. Patel.
- A. Good afternoon.
- Q. You are not a neutral observer in this dispute, correct?

 You want Epic to win this case?
 - A. I'm here to answer questions that are asked of me.
 - Q. Do you believe that the -- Apple runs the App Store in a way to quote, "rig the rules to bulldoze competition and consolidate power," end quote?
- A. No.
- Q. Did you retweet a quote -- a tweet from Senator Elizabeth
 Warren that said that?
 - **A.** I believe I have.
 - Q. You did that after your deposition you gave in this case in February, correct, sir?
 - A. I believe so, yes.
 - Q. And did you -- do you believe, by the way, that quote, any principle that supports Apple's app distribution and payments monopoly also supports an app web monopoly?
- A. I don't remember the context of that tweet. I have retweeted, but it wasn't necessarily the way the tweet was written. It might have been for parallel elements.
- Q. Do you recall that you tweeted that on September 11th, 2020 soon after Epic filed this lawsuit?

- PATEL CROSS / SRINIVASAN 1 A. I may have, yes. 2 And do you, in fact, believe that Apple has a monopoly 3 over the internet? 4 I am not a lawyer. That was not my intent. Α. 5 And do you believe that quote, under Apple's monopoly a 6 decision not to carry a product is a death sentence to that 7 product and shuts out all of its iOS users? 8 No, that was not the intent of that tweet. I am not -- I 9 have retweeted others on what the complete text of that tweet 10 was. 11 In fact, you did retweet that sentiment from your account, 12 correct, sir? 13 I don't remember everything I retweet. I may have. would have to look at my history to be definitely sure. 14 15 And, in fact, GeForce Now, your product that you are the 16 product manager of, is living proof that in fact you can reach 17 iOS users outside the App Store, right? 18 Α. Yes. 19 You were just -- maybe you were upset --20 THE COURT REPORTER: Can you repeat please? 21 BY MR. SRINIVASAN:
 - Q. And, in fact, sir, you were upset that Apple rejected the GeForce Now app as a native app on the App Store, correct?
 - A. I was disappointed, but that had nothing to do with my retweet, if that's what you're asking.

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- Q. So you independently believe these things?
- A. As a personal individual, yes. I am not sure what you define as "these things." But elements of what I have retweeted I agreed with.
- Q. And you indicated -- shifting to your title at Nvidia, you are the product manager in charge of the GeForce Now platform for Nvidia; is that correct?
 - A. I am a product manager. I'm not the product manager.
 - Q. Are you the product manager for the GeForce Now platform or you are one of many for that platform as well?
- 11 A. I am one of many.

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- Q. You started out, I believe, as a senior manager and you were promoted to director; is that right?
- 14 A. That is correct.
- Q. That promotion was a result of the GeForce Now business actually growing, correct?
 - A. I would like to think it was the merits I brought to the work I did.
- Q. Was that part of it, that the program for which you are in charge is growing also?
 - A. Sure. Part of it.
- Q. Okay. And you would agree that the GeForce Now platform that you were in charge of is, in fact, growing, correct?
- 24 **A.** Yes.
 - Q. And part of your role is, in fact, expanding GeForce Now

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     through reliance partners all over the world, correct?
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     A.
         Yes.
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         And you are doing that with GeForce Now, correct?
         Yes.
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     Α.
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         And I just want to kind of reorient on the technology
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     because there were various terms thrown around.
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         GeForce Now provides a cloud gaming service that customers
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     can use to run PC games on their individual machine; is that
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     correct?
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     Α.
         Sure, that's correct.
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         That's a streaming service?
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        Yes, a game streaming service.
     Α.
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         And so you are effectively providing customers access to a
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     virtual machine in the cloud that presumably is better than
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     the machine they own, correct?
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     Α.
        Yes.
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         Okay.
     Q.
         And so for those customers, the native machine that they
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     have is not capable of playing the game that you're providing
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     on a streaming basis, correct?
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              MR. EARNHARDT: Object to the form.
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              THE COURT: I could not hear that.
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              MR. EARNHARDT: Object to the form; lack of
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     foundation.
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              THE COURT: Overruled.
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1 THE CLERK: Counsel, you can turn it right there. 2 MR. EARNHARDT: Thank you. 3 THE COURT: I appreciate that you want to stand, which is, in a normal world, we would do that. But we need to 4 5 have the mics for the audio. You can all sit when you object 6 as long as you object into the mic. 7 MR. EARNHARDT: Understood. Thank you, Your Honor. THE COURT: Proceed. 8 9 BY MR. SRINIVASAN: 10 For those users, the native experience is not as good as 11 the streaming experience that you are providing, correct? 12 A. For the users that have CPU and other process elements 13 that are not as powerful, yes, they would have a better experience streaming. 14 15 Q. All of the games that you provide, the GeForce Now service 16 that you provide are being played over the internet, you need 17 an internet connection for your service; is that right, sir? Can you ask the question again? 18 19 You need an internet connection for the GeForce Now 20 service, correct? 21 That's correct. Α. 22 That's true whether the person is playing on an Apple device, Android, or a PC, correct? 23 24 Α. That's correct.

And I think you mentioned that your company, the GeForce

- Now service, started in 2014; is that right?
- 2 **A.** We started the technology, yes, in 2014.
- Q. And then over time you added, I think, something called the Nvidia shield was a device that you used to play GeForce
- 5 Now; is that right?

- 6 A. That sounds correct.
- Q. And then in 2016, 2017 time frame, you added PCs and Macs to your service; is that right?
- 9 A. We made a lot of changes, but that sounds correct, we added PCs and Macs.
- Q. Then it became available on mobile devices in 2020, correct, sir?
- A. I feel Android mobile might have been 2019. I don't know exactly. But, yes, the iOS in 2020.
- Q. So Android may be in 2019, then by 2020 you had -- it was working on iPhones and iPads, correct?
- 17 A. Yes. I believe October 2020 and November.
- 18 Q. Now you can play it on all of these devices, PC, Mac,
- 19 Android, web browsers, and iOS devices, correct?
- 20 **A.** Yes.

- Q. And you're not done. I think your ambition is to bring it to any device that is able to decode video, correct?
- A. I believe I said that in the deposition, but that's a personal statement of mine.
 - Q. That is your belief?

PATEL - CROSS / SRINIVASAN

A. Yeah.

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- Q. That is your goal?
 - A. That is my belief. I wouldn't call it a goal yet. We still debate it often.
 - Q. Okay.

What about the fact that you -- you told us your belief that you now want GeForce Now experience extended to every gamer out there, correct?

- A. Yes.
- Q. Are you still trying to execute on that plan?
- 11 A. Absolutely.
- 12 Q. And, in fact, you said by the third quarter of 2020,
- Nvidia had roughly 5 million users on the GeForce Now
- 14 platform; is that right?
- 15 A. Yes. We had 5 million members.
- Q. The goal for this year is to double that to 10 million users, correct?
 - A. At the time that was a goal, yes.
- 19 Q. At the time you gave your deposition in February?
- 20 **A.** Yes.
- Q. Okay. And is it fair to say that your business is expanding rapidly?
- A. It is fair to say that we are signing on more members, yes.
 - Q. And by the way, you had talked about things like server

- outages, wait times, latency, and some other things; that -despite all of those things, you are doubling the number of
 users to your service, correct?
- A. That is the target, yes.

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- Q. And you mentioned also that sometimes your servers go out and that means people can't play. That would be the same if somebody was on a native device and that device stopped working, they wouldn't be able to play either, right?
- A. Sure, if the device stopped working.
- Q. And specifically, sir, it's your view that more and more iPhone users in particular are discovering the service and finding games and engaging longer, correct?
- A. At the time I gave my deposition, I believe I stated the latest metrics I'd seen had shown that.
 - Q. And, in fact, Nvidia used to charge 4.99 a month for the service, right?
- 17 A. That's correct.
- Q. And now you're charging -- you had to change the monthly membership; you had to increase it, correct?
- 20 \blacksquare A. In March we changed the pricing to 9.99 for paid users.
- Q. You also added a yearly subscription of \$90 a year -- 89.99, correct?
 - A. That sounds right.
- 24 \blacksquare Q. So you doubled your subscription price this year, correct?
 - A. We -- for all new users, the price is now 9.99 per month

1 or 89.99 for the year. It might be 99.99 for the year. Ι 2 would have to check. 3 But all existing users, what we call founders, people that joined us from early on, they are grandfathered in to the 4.99 4 5 price. 6 They get to keep the old rate? 7 A. Yes. 8 You talked about your server capacity with Mr. Earnhardt. 9 In fact, you have plans to add servers to your data centers to 10 support the GeForce Now service, right? 11 Yes. We will be adding capacity. 12 And, in fact, you are adding capacity to the data centers 13 all over the world, to the United States, Europe, and other 14 places, right? 15 Nvidia's capacity to our own data centers and when we seek 16 out partnerships with others around the world, yes. 17 As you add these data centers, do you expect the wait times to go down? 18 19 It's -- it depends on how many users show up. Capacity is 20 fixed and it depends on how many show up. 21 Q. Fair enough. 22 You are expecting your user base to increase, correct? 23 Α. Yes. 24 So the idea is to add data centers to outpace the

increasing users, right; that's the goal?

- A. Our goal is to steadily increase the capacity as the business grows. And if there's more users, we will have to decide what to do.
- Q. I assume that you view the wait times as a problem, right?
- A. We strive to have very low to zero wait time for paying users.
- Q. And is part of solving that adding more capacity?
- A. It can be.

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- Q. Are you trying other efforts to solve that problem too?
- A. If we can add more users to the same server, that's another way.
 - Q. So let's take a moment and talk about the servers.

 I think you said there are 800 to 850 games currently available on the platform currently?
 - **A.** 850 plus, yes.
- Q. And I believe you already have permission from developers to add upwards of 2500 more games; is that right?
 - A. The last time I talked to the developer relation's team, yeah, it was around that number.
- 20 Q. You are, in fact, adding games to the service weekly?
- 21 A. Weekly, yes.
- Q. And can you give me some examples, give us all some
 examples of some popular titles on GeForce Now that people can
 play?
 - A. Fortnite is a popular title on GeForce Now. League of

Legends is a popular title. Rocket League is another popular title. Counter-Strike Global is a popular title. Cyberpunk is in the top there.

You are stretching my memory, but Rainbow Seat 6 is a popular title.

- Q. That's a great list of games. Almost every one of those games you talked about you play with an internet connection, correct?
- A. Well, for GeForce Now you need to have an internet connection to play these games.
- Q. I mean even if you are playing on a native basis; most of those games are played against other users and, therefore, use the internet, correct, sir?
- A. That is true. I'm just recalling. I think Cyberpunk does have the option to play not having the internet. You can play as a first person as in no interaction with others. I haven't played a lot of that game, but I believe that's true.

I'm not an expert on all the games there, so there may be modes where you can play a part of the game without having an internet connection.

- Q. Every one of those games you mentioned has a very popular mode. In fact, the more popular mode is against other players over the internet, correct?
- A. I am not a player of all those games, from what I've heard, I think that would be mostly accurate.

1 Q. That's your understanding? 2 So all the things you said about latency, about an internet connection would apply to every one of those games 3 4 whether they were being played natively or not, correct? 5 Well, latency for internet access, decoding frames is 6 different for multiplayer games. So I don't know -- I 7 honestly don't have the technical depth to tell you whether 8 latency on a multiplayer server is different from latency 9 cloud streaming. 10 You don't know if there's a difference? 11 I don't know if the difference manifests itself as the 12 same cloud gaming as it does in multiplayer. 13 Your company is betting that the difference won't be 14 significant because your company necessarily relies on an 15 internet connection for game play, right? 16 Yes. And we provide, as you alluded to, a lot of users' 17 access to these games. In fact, the games that you listed -- because I was 18 19 confused about some of your testimony earlier -- the games 20 that you listed, almost every one of those games can be played 21 or Xbox, PlayStation, and Nintendo, correct? 22 I haven't done the research. I wouldn't be able to tell 23 you if each one of those games is listed on the platforms, but 24 it sounds fair, but I can't tell you for sure -- certain.

Your general understanding is a game, for instance, like

League of Legends can be played on different platforms? 1 2 MR. EARNHARDT: Objection, Your Honor. He just 3 testified he doesn't have knowledge. THE COURT: If he doesn't know the answer to that 4 5 question, there's problem. 6 Can you answer the question? 7 THE WITNESS: For example, League of Legends on 8 Nintendo, I don't know. I would have to guess no, but, again, 9 it's a pure guess on my part. It's not a game I play. 10 BY MR. SRINIVASAN: 11 So a game like Rocket League you mentioned, you are not 12 aware that Rocket League is commonly played on Xbox, Sony, and 13 Nintendo? Rocket League sounds familiar. I would expect it to be, 14 15 but I haven't gone to every single one of those and see does 16 Rocket League work here, does Rocket League work here. 17 Q. Fair enough. Would you guess you have 850 games on your server? You 18 19 would imagine that at least some of those games are also being 20 played against users who are playing on an Xbox, a Sony, or a 21 Nintendo, correct? 22 Yes. Some of those games would be available on those 23 platforms. Let's take Fortnite. Fortnite is available on your 24 25 platform, correct, sir?

- A. That is correct.
- **Q.** Players who are playing *Fortnite* are playing against other people over the internet, correct?
- A. Yes.

- Q. If somebody is playing on GeForce Now, they maybe could be playing against a person on an Xbox, or they could be playing against a person on a PlayStation or Nintendo Switch, right?
- A. Maybe. The reason I don't know that, it depends on the publisher how they decide who those users can play against.
- Q. So it's really your testimony, sir, today you are not aware that people using *Fortnite* on GeForce Now, if they are playing against people on an Xbox, a Sony, or a Nintendo?
- A. I don't know for sure. I know that people playing on GeForce Now are definitely playing with other users that play PC games.

And the reason I cannot be definite is different publishers have different rules. Some do allow what you're saying and some don't. I just personally don't know Fortnite's multiplayer system is universal across all those platforms. It may be, I just don't know.

- Q. You don't know that it enables cross-platform play, and has a metaverse of some renown?
- A. I do not personally know that, no.
- Q. You can't tell me. Let me ask you this: Have any players complained to you having used your service to say, you know

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there, yes.

what, this service is no good because I can't compete against players who are playing on these other platforms? Have you heard that complaint? I have been in meetings where the topic has come up. Α. haven't personally heard that complaint. So you've heard the complaint in meetings, but you didn't know that they were playing against other players? No, that they were playing other players but not necessarily for Fortnite but for other games. And they were saying they may have been saying I'm playing against PC users on my shield with a controller and the other side is a PC user that feels that I have a disadvantage. I recall a conversation like that. You recall one conversation about somebody playing against a PC user; is that right? A. I wouldn't say one, but it might have been a few in meetings where I was in the topic had been brought up. You testified at your deposition that GeForce Now provides very good graphics, correct? That sounds familiar. Α. In fact, you said it has the best graphics out there, Q. right? I said our GPUs generates some of the best graphics out

Your company, Nvidia, has been working on graphics

DIANE E. SKILLMAN, OFFICIAL COURT REPORTER, USDC

- technology for decades, right?
- A. Yes.

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- Q. And gamers want good graphics; would you agree?
- A. In general, yes.
- Q. Are there gamers you know who don't want good graphics?
 - A. Yes. There's a segment of users that play competitive games. And having less graphics means that the game renders faster so you have a higher frames per second. So that gives the competitive advantage that some games turn off settings to get less graphics but a higher throughput.
- Q. And in addition to wanting good graphics, one of the -- let me strike that and ask a different question.
- There are some advantages to using the GeForce Now service as opposed to a native service, correct, sir?
- A. Yes.
- Q. One of those is, for instance, you download patches automatically for your users; they don't have to do that on their own, correct?
- A. Yes. There's a convenience factor there.
- Q. And GeForce Now allows users to access games without
 having to worry about running out of storage on their personal
 machine, right?
 - A. That's correct.
- Q. And you also give users access, some of your users to more compute power than they would have on their native device,

PATEL - CROSS / SRINIVASAN

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- A. Yes, for some users that's true.
- **Q.** By the way, you mentioned earlier in the -- in your direct testimony that folks have to sign up to the underlying service before they can use your service, correct?
- A. They have to sign up for the service in order to use it.
- Q. They have to essentially sign up for the game. If they want Fortnite, they have to be a Fortnite user before they can play on your platform, correct?
- A. That's correct.
- Q. That's no different than on an iPhone or a PC. Those folks who want to play *Fortnite* first have to sign up, get the game, and start playing it on their machine, correct?
 - A. I would say assume, yes, that we didn't --
- 15 **Q.** There's no special burden to use your service in that regard, is there?
 - A. I think on my service you have to sign up outside of the service. On an iPhone, you can sign up on the service is the only difference I can think of.
- Q. You have to -- you have to have the right to play the game before you can use it on your service, right?
 - A. That's correct.
- Q. And would you agree, sir, that GeForce Now offers a near flawless experience?
 - A. That's what we strive for. And users with a strong

internet connection, I believe that can be the case. 1 2 Have you read press reports touting your service? 3 Α. I have. 4 Have you heard -- sorry. One moment. 5 Do you disagree, sir, that your -- that the GeForce Now service felt extremely responsive, and one cannot detect any 6 7 lag between the inputs and the characters onscreen actions. 8 Have you heard the description of your service in that 9 way? 10 I have heard similar press reviews stating it. I don't 11 know if I've ever read those exact words. 12 Do you disagree with that? 13 A. No, I do not. 14 You talked about latency and some other issues, technical 15 issues. Most of your users are not suffering from those 16 issues to a point that makes the game not exciting, correct? 17 Let me strike that and ask a different question. Latency and the other issues that you talked about are not 18 19 preventing folks from signing up and enjoying your service, 20 right? 21 Latency and some of the other issues discussed are not a blocker for some substantive users. They can still enjoy the 22 23 service.

internet improvement is down from say 2018, correct?

In fact, the issue of latency is, for instance, because of

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- today is vastly improved over say five years ago, correct?
- The overall quality with the bandwidth today would be vastly better.
- Q. Even as recently as two years ago, the experience has improved significantly in the last two years; would you not agree?

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I don't have numbers to state that as confidently as you are.

The reason I'm stating this is we haven't changed the quality in the last two years. As long as the user had 15 megabits per second minimum, whatever the minimums we have on the website, they would have a consistent experience over the last two years.

- Q. Fair enough. That said, I forgot to ask you a question.

 You mentioned that you are, in fact, investing in more and
 more data centers around the world, right?
 - A. In more capacity and some may include new data centers, yes.
- Q. Is the plan to continue to do so?
- A. Like any business, we will continue to monitor the health of the business and needs of users, and make decisions based on that.
- Q. Let's move to GeForce Now and iOS.

 People can now play the game on their iPhone -- can now use the GeForce Now service on iPhones and iPads, correct?
 - A. Yes, they can.

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- Q. And you agree that on those devices in particular, which is on the web-based platform, delivers a very good gaming experience, correct?
- A. It provides a good gaming experience, yes.
- Q. In fact, even on iOS, it's your view that it provides the best graphics capabilities on those devices, correct?
- A. Yes. Based on what we are under on the server, it will be a good graphics experience.
 - Q. That's even though it is being offered as a web-based service and not as a native app, correct?
 - A. Yes.
 - Q. In fact, you have received lots of positive feedback from

users since launching GeForce Now in iOS, correct?

- A. We have received positive feedback from users, yes.
- Q. Right.

In fact, do you recall that on specifically iOS, it was described -- that service on iOS was described as quote smoother than a slab of butter wrapped in silk? The games I tested mostly performed brilliantly and without any noticeable frame drop or input lag.

Have you read reviews like that?

- A. I have not read that specific review, but when the app launched, I did read reviews. And my memory of them was mostly positive.
- Q. And, in fact, it's hard to forget that phrasing which is why you probably remember you didn't read that one, but that is consistent with the reviews you read; is that right?
- A. That phrasing has a lot of adjectives that I'm not used to, but others had described being happy to play the service on the iPhone.
- Q. Had you heard that your service is performing excellently even on older devices?
- A. Yes.
- Q. So particularly for people who have older PCs or older phones in particular, the performance that GeForce Now provides is better than the native version of whatever game they would be playing, correct?

- A. That's true for PCs. I don't recall that for phones. But I do recall that for PCs.
 - **Q.** And would you agree then the user experience for streaming services is better than ever today?
 - A. In my personal opinion? I believe so, yes.
 - Q. And your subscriber base is increasing, correct?
 - A. Yes.

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- Q. And your subscription rates are increasing, correct?
- A. The subscription rate is steady, yes.
- Q. Okay. And you are at 5 million and you are hoping to add on top of that this year?
 - A. Yes.
- Q. Now, you mentioned a number of things at the end of your testimony that I want to just make sure I have some context for, which is latency, usage caps, internet speed. You can't play it in an airplane or a park if you don't have internet connection; those limitations are true whether the GeForce Now service is being offered as a web app or as a native app, correct?
 - A. Yes. Those requirements would be fairly consistent.
 - Q. Those requirements have nothing do with the fact that you're not on the App Store, correct?
 - A. Yes.
- Q. And you also mentioned the capacity issues in terms of wait times and queue times. Again, that has nothing to do

PATEL - CROSS / SRINIVASAN 1 with whether the players playing on a native app or web App, 2 correct? 3 That is correct. Q. On -- when an iOS user is using the GeForce Now service, 4 5 they can make a in-App purchase if the game provides that 6 option, correct? 7 If the game offers in-app purchases they can. Yes. 8 Apple does not receive any commissions for those 9 purchases, right? 10 We -- for the user, we just show the screen and the user 11 has the ability to purchase through that publisher. That's 12 the context of what I know how that transaction happens. 13 What I'm saying is as far as your service is concerned, 14 the fact that it is being consumed on an iPhone doesn't create 15 some commission as far as you know, correct? 16 A. Our services not even aware that happens because we are 17 just showing the user a screen that the game or the publisher 18 shows. 19 So, yes, in that context, we are not paying anything to 20 Apple, but that's all I can say. 21 Nvidia itself, your company doesn't pay anything to Apple

- to make GeForce Now available on the iPhone and the iPad, right?
- A. Through the browser client, there is no commercial agreement required as far as I know.

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- Q. You were the corporate representative for Nvidia. Is there anybody else who would know if there is some payment going from Nvidia to Apple because of --
- Q. So in exchange for providing a state-of-the-art hardware platform to Nvidia, Apple receives nothing at all, and yet you
- 7 are able to monetize your service on iPhones, correct?
 - A. We provide the service through the browser and users are able to purchase our service through in-App purchase, yes.
 - Q. Apple has done nothing at all to prevent Nvidia from delivering GeForce Now on the Safari browsers, right?
- 12 **A.** Sorry. Can you repeat the question?

I'm pretty certain there isn't.

- Q. Has Apple done anything to stop Nvidia from offering
 GeForce Now on Safari?
- 15 **A.** No.

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- 16 Q. In Safari for iOS on the iPad specifically?
- 17 **A.** No.
- Q. You mentioned *Fortnite*. *Fortnite* has been on GeForce Now since the game launched, correct?
- A. Around when the game launched, like very soon after the game launched.
 - Q. It is the most popular game on GeForce Now, isn't it?
- 23 **A.** It is.

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Q. I think at one point you said during beta testing -THE COURT: You're going too fast.

BY MR. SRINIVASAN:

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- Q. At one point during beta testing, you mentioned that the Fortnite averaged more than half of the GeForce Now traffic.
 - Do you recall that?
- A. I recall that.
- Q. It's a very popular game?
- A. Yes, at the time of my deposition, that was true.

THE COURT: Has it changed?

THE WITNESS: I wouldn't say more than half anymore.

I would say it's in the 35 to 40 percent range.

BY MR. SRINIVASAN:

- 12 Q. For all the in-app purchases made by the GeForce Now users
- who are playing Fortnite, all of that revenue goes to Epic,
- 14 right?
- A. That's correct. GeForce -- Nvidia and GeForce Now are not in the middle of that transaction.
- Q. Epic does not pay a commission to Nvidia for hosting the game?
 - A. That's correct. None of the publishers do.
- 20 Q. And, in fact, Nvidia has been working with Epic to bring
- 21 Fortnite via GeForce Now to iPhones and iPads, right, sir?
- 22 **A.** That's correct.
- Q. That was announced, I believe, last year that it was going
- 24 to come out in the spring; is that right?
 - A. That sounds familiar. I don't recall the exact dates.

And I think as of the time of your February deposition, 1 Q. 2 you were suggesting that it was going to come out perhaps in 3 April. 4 Do you recall that? 5 Α. I do recall me stating that the current date was around 6 April, during the time of the deposition. 7 And do you currently know when the planned launch is for 8 Fortnite on the GeForce Now platform for iOS users? 9 Α. I wouldn't call it a planned launch. In the meeting I was 10 in, a date was suggested of when we would release some data. 11 What is that date, sir? 12 Α. The date I heard was October of this year. 13 So the plan now is to beta launch GeForce Now on iOS 14 devices in October; is that right? 15 That's my understanding from the meeting I was in, yes. Α. 16 And the plan used to be to do it in the spring of this 17 year; is that right? That's in the meetings I was in during the deposition. 18 19 That -- I think the word "plan" is very strong. I think it 20 was a suggestion that that could be a target date. That's why 21 target is probably a better descriptor. 22 Can we introduce DX3815? I have to hand you a binder. 23 Α. Sure. 24 THE COURT: Counsel, let me ask you: How long -- how

much more of your cross do you have?

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              MS. DEARBORN: Maybe ten minutes, Your Honor.
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              THE COURT:
                         Okay.
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         And, sir, are you local? Will you be here tomorrow?
              THE WITNESS: I am in San Francisco. I can drive.
 4
5
     Yes.
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              THE COURT: What might make sense is to go ahead and
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     stop at this juncture to do what needs to be done under seal.
8
         Do you have anything to do under seal?
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              MR. SRINIVASAN: I don't believe so, Your Honor.
10
              THE COURT: Okay. With respect to the plaintiff's
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     request to do something under seal, can you point me to the
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     document? Is there a document that addresses the issue?
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              MR. EARNHARDT: No, Your Honor. That's part of the
14
     trouble. There is no document. There is deposition testimony
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     that I -- I know what the testimony is, but it's been --
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              THE COURT: I don't have a transcript for him. Do
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     you have a transcript for me?
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              MR. EARNHARDT: Yes.
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              THE COURT: Could I have that, please?
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         Can you point me to the page?
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              MR. EARNHARDT: There are several pages. The first
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     page is transcript 122, starting at Line 20.
23
              THE COURT:
                         Okay.
         I have a calendar at 3:30. So my preference is to stop
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     the Cross at this point, go in closed session. We have a few
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1 questions asked with respect to the under seal matters to 2 which you can then Cross. And if it takes a few less minutes, that's fine. 3 So -- and then the other thing I wanted to tell you all, I 4 5 need to talk to you about your motions to strike expert 6 testimony. I've not asked you to prepare for that yet, but 7 before I make rulings, I do want to hear from you. Do you 8 want to do that at the beginning of tomorrow's session? 9 And I say that because, you know, people may not be really 10 interested in listening to that kind of legal argument. 11 MS. FORREST: Your Honor, we can do that at the 12 beginning of tomorrow's session. 13 MR. DOREN: Agreed, Your Honor. 14 THE COURT: Okay. So for those listening, we always 15 start at 8:00 o'clock. I try to have testimony begin by 8:15, 16 but I suspect that this will go a little bit longer than 15 17 minutes. 18 So if you -- if you call in and you just hear lawyers 19 arguing, it's because we are talking about those pending 20 motions. 21 MS. FORREST: Your Honor, is there anything specific 22 or just the entirety of the pending motions or is there 23 anything in particular you would like us to focus on? We're 24 happy to do all of it or some of it if there's a specific

25

issue you are focused on.

THE COURT: It's really procedural more than anything 1 2 else. 3 MS. FORREST: Very well. THE COURT: Okay. 4 5 So at this point the Court is going to close the proceedings, seal the courtroom. Those of you in the 6 7 audience, if you will now leave. And we'll see you, some of 8 you tomorrow perhaps. 9 (Proceedings under seal on the next page.) (Proceedings adjourned at 3:06 p.m.) 10 11 12 13 CERTIFICATE OF REPORTER 14 I, Diane E. Skillman, Official Reporter for the 15 United States Court, Northern District of California, hereby 16 certify that the foregoing is a correct transcript from the 17 record of proceedings in the above-entitled matter. 18 Disne E. Skillman 19 DIANE E. SKILLMAN, CSR 4909, RPR, FCRR 20 21 Wednesday, May 5, 2021 22 23 24 25